Summer training report

(Research paper)

On

"Analysis of health policy & system of the different countries towards the global pandemic (Covid-19)"

By

Chencho wangdi

MBA (Rural Management)

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IIHMR UNIVERSITY

Acknowledgement

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Acronyms/Abbreviations

1.	SAARC	South Asian Association Regional Co-operation.
2.	WHO	World Health Organisation
3.	EU	European Union
4.	ITA	International Trade Administrsation.
5.	SMEs	Small & Medium Enterprises
6.	ICO	Institute of credit officials

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Introduction

Covid-19 are a family of viruses which have the capacity to cause illness starting from just a cold to severe diseases. A corona virus is a new type of virus that has not been previously identified in humans. This virus got it's name from the way they look under a microscopic view.

In december 2019, a pneumonia associated with the Covid-19 took place in China. It all started 3 days after Chinese new year ended and when their government declared about the wide spread of this virus which later on went passed over 186 territories around the world. The world Health Organization later declared this virus as a pandemic, and on February 11, 2020, WHO newly named this virus as corona virus disease 2019 (Covid-19). A pandemic is defined as "a situation or state during which a disease spreads over a large portion of area and affects a very high numbers of the population Earlier, many of the patients who first suffered from this virus in China was being suspected of being connected to a mass live animal market in China which was later on it was proved to be incorrect as those patients didn't have any sort of exposure to the market.

Of the total 1.6 million confirmed cases in the world, cases occurred in China. Euroean countries such as Italy and Spain earlier was once in second and third after U.S. but later on showed a considerable improvement in overcoming the virus. On 30th January, the international Health Regulation Emergency Committee of the World health organization declared the outbreak as a "public health emergency of international concern". As of 15 May, over 4.4 million cases have been identified globally in about 188 countries with a total of over 3 lakh death cases. Also 1.5 million came out recovered.

Abstract

The Covid-19 which started in Wuhan, China and resulted in outbreak in a global scale spreading to as many as 186 countries causing unaccountable damages both on the creation as well as the created. The need for every country to understand that the virus can overwhelm even the most advanced health systems resulting in the need to fully reconfigure health sectors in response. The World health organization had named this virus as the novel corona virus disease 2019 (COVID-19). The global stock markets have suffered greatly since the time of this virus being declared as pandemic. This global pandemic has caused unimaginable disruption on the unemployment, financial and health sector causing it's economic to fall down. The United state of America, Italy and Spain being the top 3 country with the highest number of positive cases during the month of March and April. Italy and Spain has shown considerable effort in overcoming the virus but U.S.A. is still on top with the number of cases rising at an alarming rate. So, here the current Covid-19 should be examined carefully. This might begin with a merger of public-private task force to develop a plan to overcome global recession before a vaccine comes out. Only then we will be able to make a a way forward and break the chain of the wide spread of this global pandemic.

Literature review

A number of facts and figures about the coronavirus 2019 presented in literature have led to ambiguity about from where this virus has evolved from and when will a vaccine be ready and also how long will it take to make and deliver this virus to over 186 countries with more than 2 million positive cases worldwide.

The situation at home might be normal and calm, But in the hospitals, it's like a war. Pointed by bocconi university's director. His statement clearly depicts how bad is the situation for them at their place of work. As said by a political scientist at John Hopkins University, what we are looking at currently in Italy will become the same around the world in the coming days or weeks. Having the best medical care previously I had never even dreamed of running out of machines to treat our patient which as stated by an Indian-American Prakriti Gaba, a resident in New York City. This written work conveys how this virus has engulfed every machines present and how much of focus should be given towards health care system in terms of innovation.

Methodology

For this research paper, online databases from the internet were searched for most recent as well as new publications on corona virus appearance in mainland China from 2019, and the spread of this newly emerged virus to many countries in the world in 2020. The case studies mentioned in the websites has not been made part of this research in order to avoid primary data. The whole research on this topic has been done using secondary data as it was not possible to do face to face interview in this current pandemic situation. Some other data sources were brought forward from WHO report. The rate of cases as given in this paper has been directly put in from the already existent figures. The identifications of the top 3 countries used as the major part in this study followed methodology established in previous studies about the coronavirus. The informations have been gathered using the following procedures; First, the top 3 countries that has been highly infected by the virus were identified using the already available informations from various websites. Second, four major points such as the unemployment rate, economic system, financial system and the health care system of all top 3 countries namely U.S., Italy and Spain were being kept in mind in the whole research writing process. One major input was being utilized during the whole research works, i.e. to talk mostly about the health system and its policies related to the coronavirus on which this research paper was based upon.

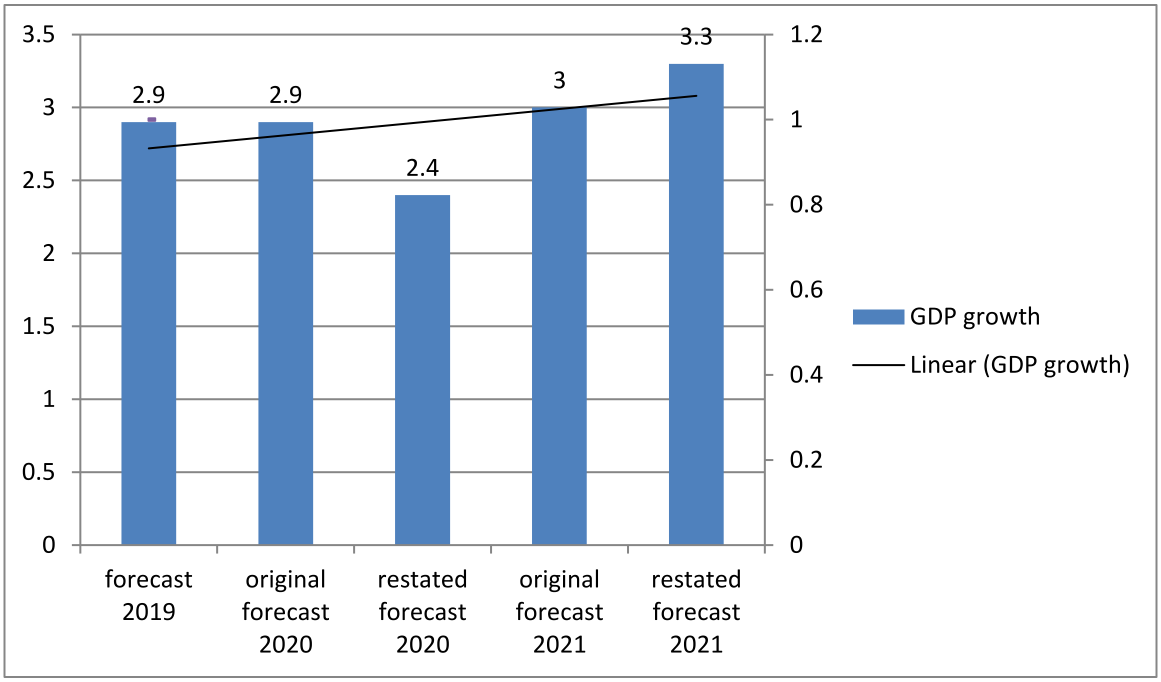
Impact of the corona virus pandemic onto world economy:

While there is no simple way to tell exactly what economic disruption the virus can have on the economy as a whole, Early estimates predicted that if the Covid-19 turn into a global pandemic then the GDP of the world will fall down to 2.4 percent from the estimated 3 percent for the year 2020. The global stock markets have suffered greatly since the time of virus being declared as pandemic. The economic damage caused by this virus is carried on by a fall in the consumer demand and this active change can be seen in heavily impacted industries such as tourism and fuel.

Despite of clear danger imposed by the virus on the world economy, there are other reasons to be full of hope that this worst-case scenario can be controlled keeping in mind the effects of a demand driven recession which can be countered with government spending. There is the fact that the intense situation may have a clear end date when all travel restrictions are lifted. With the right mix of right government responses and luck, some of the more negative predictions may not come to pass.

Forecasted global real GDP growth due to the Covid-19, from 2019 – 2021.

Year wise original/restated forecast	Real gross domestic product growth
Forecast 2019	2.9%
Original forecast 2020	2.9%
Restated forecast 2020	2.4%
Original forecast 2021	3%
Restated forecast 2021	3.3%



Initiatives to combat covid-19: United States

Socio – Economic initiatives

In United States, the politicians have given positive nod to a $2 trillion stimulus package to lower the blow of the corona virus effect. But at the same time policy changes will have to take place. Central banks operate the so called "discount windows that provide short-term loan to ensure liquidity problems don't bring down the banking system. The actual need is a real economy discount window that can deliver unlimited liquidity to soften households and firms. A pandemic threat like the one we are facing currently can disrupt the global supply of goods making it harder for U.S. firms to fill order and on the other hand slow the demand for its products and services. While the exact effect of this virus on the U.S. economy is unknown and unknowable, it is clear that it poses tremendous risks.

Till what extend this affects their businesses would entirely be shoulder on how strongly their supply chain is being carried out. Many industry deal with the time between requiring new supplies from china and putting them into their own production with very short times. The continuous fall in the supply chain is making it very difficult for the U.S. to bring the goods to their customers.

- Decreased buying power by the consumers:

In this scenario, there are two different effects to be taken into consideration. First of all, due to the fear of being exposed to the virus some individuals buy less of goods and services they prefer. “For example, they may be reluctant to travel out in order to fill their stomach. The result is that air travel and hotels could feel a real shock. There has been constant occurance of lesser demand for some items than before. Due to the uneasiness of the spread of this virus it seems like their government might possibly import less in order to save it for their consumers for future need.

Secondly, Loss of 1.6 million visitors with an added decrease in the spending of around $10 billion dollar is expected all due to the shut down of industries leading to lost in jobs for workers and further leading to falling of demand curve.

Thirdly, The financial institutions might change the loan payment system in order for their customers to be able to clear their loan at the end of the current situation. They might as well provide a short-term loan.

Financial initiatives

To illustrate the economic shock that the global pandemic can cause on the world economy, consider how the 2008 global financial crisis delivered recessions in three different shapes namely the V-shaped, U-shaped and L-shaped. One of the countries that is going through a period of economic recession due to the virus is Japan.

Monetary risk: The expected pandemic has already started tension in the capital markets by starting a pushing response from the central banks. If liquidity problems’ continue and real economy problems’ could lead to down streams, capital issues can arise. In such case of a financial issue, capital formation might take a direct hit causing a huge damage to the labor and productivity as well.

- Prolonged “real economy freeze”: Months of physical distancing could destroy capital formation, labor participation and productivity growth. Unlike financial hit, an extended freeze of this magnitude damaging supply side.

The financial and real economies are inter-related with each other in two separate ways: First of all, an unprecedented Covid 19 crisis could result in real economy bankruptcies, which makes it harder for the financial system to overcome. Meanwhile, a financial crisis would lead to the starvation of the real economy of credit.

In wake of the virus and as a result of uprising economic uncertainty the U.S. interest rates have recently come down to a low. The 10 year old treasury yield fell down to 1.5% from 1.69% after remaining steady throughout 2019 and early 2020. It dropped down to 1% on March 3 for the 1st time in 150 years. This unusual dip has called for action from the Wall Street. There has been change in the interest rates when compared to before the virus came. The short-term interest rates and much higher when compared to the long-term interest rates which is totally not a normal thing. So, with this type of idea the financial institutions are expecting the federal to lower the long-term rates in order to bring down or counter the effects of recession.

Administrative initiatives

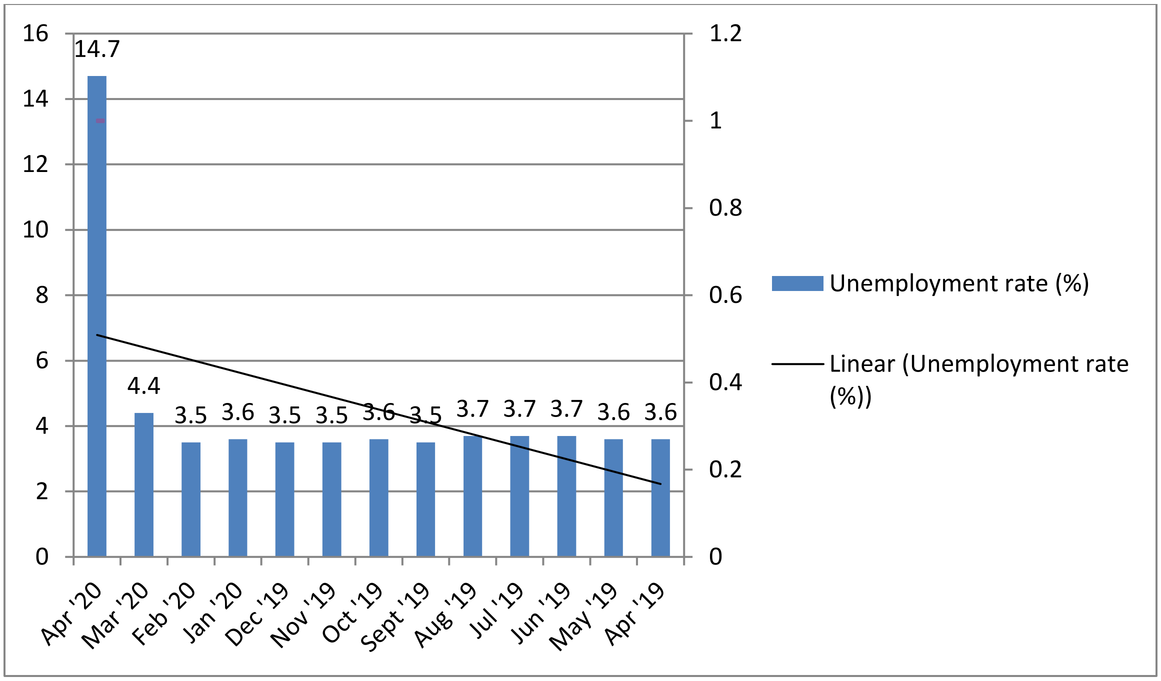
In March 2020 alone, the state had its highest number of unemployment with 6.9 % ‘Workers in the leisure and hospitality industry suffered the highest unemployment rate of any industry at 39.3 percent as of April 2020.’

Following are the four main “principles for economic policy action in response to the corona virus”

- “Put more, not fewer, resources in public health efforts.”
- “Assure businesses that things will be good even if the virus hits their sector and cause harm when necessary.”
- Cool down “financial markets.”
- “Ease the risks for households and vulnerable population.”

Monthly unemployment rate in the United States from April 2019 to March 2020

MM/YYYY	Unemployment rate (%)
April 2020	14.7
March 2020	4.4
February 2020	3.5
January 2020	3.6
December 2019	3.5
November 2019	3.5
October 2019	3.6
September 2019	3.5
August 2019	3.6
July 2019	3.7
June 2019	3.7
May 2019	3.6
April 2019	3.7



Healthcare initiatives

The best in the world health care system is in a thick soup due to the wide spread virus with medical workers expecting a great need of urgent care. Even the football stadiums, various centers and horse race tracks are being changed into isolation zones. Due to the virus spreading across the U.S. like a tsunami the retired doctors has been called in to treat the patients.

With the army being ropped in to construct temporary hospitals even initiatives are being taken to make way for additional beds, ventilators and new medical equipments. Various stories of exhaustion, hard work appeared from the doctors in New York. To avoid future worrisome situation, an action plan is being framed at the earliest.

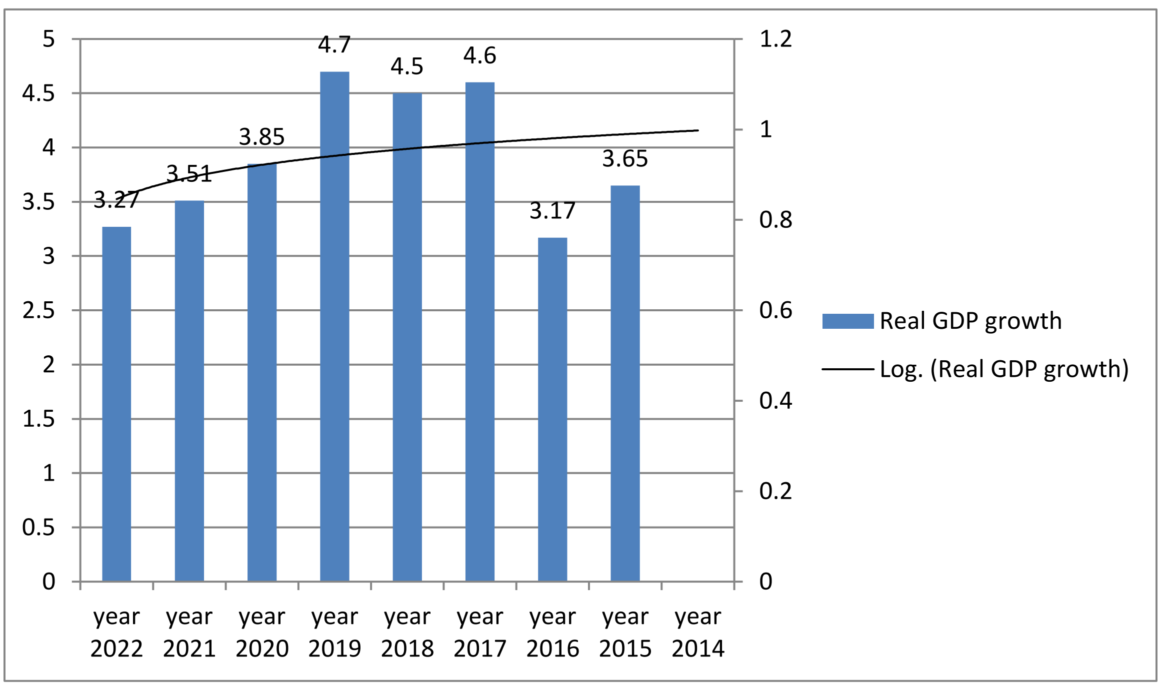
In New York, 114 sites has been identified in all fifty states to construct hospitals if required. A football ground was being changed into a hospital in seattle. Looking at the diminishing resources, a news is that the health professionals are even being told to re-use the surgical face mask for a seven days at a time. Even if there are a total of 1,60,000 ventilators available at present still it would be less if the number of patients infected increases and keeping in mind the people in rural areas. These problems will most likely teach us on the importance of even the basic tools.

Initiatives to combat covid-19: Spain

Socio-economic initiatives

Within the euro zone Spain and Italy are the less advantaged countries. The IMF experts predicts that both their GDP as well as the growth would contract at its lowest. If it happens than it will be the worst data ever recorded in the Spanish history. Their data would be falling somewhere between 17 and 21% if above trend continuous for long. Their economic growth was low even before the situation arised and now it has gone even lower after it..

Year wise forecast	Real gross domestic product growth (%)
Year 2022	3.27
Year 2021	3.51
Year 2020	3.85
Year 2019	4.7
Year 2018	4.5
Year 2017	4.6
Year 2016	3.17
Year 2015	3.65
Year 2014	2.38



- Challenges for the Spanish government in overcoming covid-19.

<u>The **fall in 2020 is uncountable**</u>. “It is most likely that Spain’s GDP will fall by 6 and 10% in 2020. And a transformation in 2021 will not be enough to recover the losses that have occurred during the pandemic.”

I. The ground scenario for 2020 predicts that “the average use of productive capacity in the economy was 80% in the weeks of less strict confinement and 60% In the first two weeks of April.”
II. /Helping companies survive and restart their business as soon as possible is important to the organizational capital and employment levels necessary to recovery.’
III. “Looking a head of their short-term benefits, demand and incomes policies will not be sufficient in the medium and long term to ease the aftermath of this crisis.”

- Economic measures to counteract the covid-19 impact.

“The covid-19 is having a unprecedented effect on Spain. As of 31^{st} March over 90,000 people have been infected and, unfortunately, more than 8,000 have died. The government announcement a state of national emergency on 14 March and among the procedures, ‘imposed a limit on the movement of the population and declared the closure of schools, shops and other establishments, with the exception of essential services.’ Faced with this public health crisis the priority area for action is to strengthen the healthcare system in order to increase its capacity to treat the sick and vulnerable groups.” It is therefore important to minimize the risk of spread of this virus to the economy and ensure that the rumbling of the economic activity is stabilized.

The objective here is to permit economic activity and employment to quickly backup after the shock, preventing the continuous flow of income in the economy from getting blocked. “So, to end this, the government of Spanish has presented a battery of measures aimed at reducing the covid-19 crisis on its economy which are follows.”

1. A direct aid amounting to 21 billion euro package (1.7% of GDP).
2. “A line of guarantees of up to 100 billion and a moratorium on mortgage debtors.”
3. “In order to protect its households who find themselves in a most vulnerable situation as the result of this crisis, the government has set up that the essential supplies such as electricity, water, gas and telecommunications will be guaranteed.”
4. “To safeguard the workers it has facilitated the adaptation of working hours and remote working whenever possible.”
5. To protect the companies, “the government has established a deferral of tax payments for SMEs, a reduction of social security contributions for workers affected by ERTEs.”
6. A package of “100 billion euros in order to safeguard liquidity of the companies and self-employed workers.”

7. 20 million euros as a guaranteed 80% loan “for SMEs and self-employed workers, while for all other companies, the state guarantee will extend to 70% for new loans and to 60% for renewals.”

Financial initiatives

“Amid this pandemic, request for over the change in repayment schedule for loans granted by the general secretariat for industry and small and medium enterprises: Those tourism sectors as well as it’s related retail, hotels and restaurant sectors which generate their^activity between February and june and which hire or retain workers under permanent seasonal contracts will be apply for 50% reduction of employer’s social security contribution. ‘

*Limits has also been set on the sums that may be rendered, whereby the amount of the vested rights available for surrender will be the smaller of the following amounts, with respect to all pension schemes held by the applicant::

Amount 1:

“For workers rendered unemployed due to a gapped procedure implemented in the wake of the virus: the amount of net salaries not received.”

“For job giver’s businesses affected by the shut down: the estimated net revenues not received due to closure in such situation.”

“For self-employed workers who have stopped their activity as a result of the state of emergency: the net income not received due to it.”

- 1st financial help measures in Spain.

Towards the declaration of the state of alarm in Spain because of the outbreak on March 14, 2020, the Spanish government announced the implementation of a series of extraordinary measures in the financial sector in order to address the economic impact by the virus. Mentioned below are the measures adopted:

1) Mortgage moratorium: Creditors shall grant a suspension on the payment of debts incurred for the acquisition of the following;
   I. Main residence,
   II. Properties affected by the economic activity disruption,
   III. Property owners who has stopped receiving income.

Such moratorium is only granted to those debtors who are considered to be in the state of economic vulnerability. Creditors that are registered with the bank of Spain shall the notify the bank of their existence and duration of the moratorium for accounting purposes, and non-inclusion of such exposure in the creditor’s risk forecast calculation.

2) Consumer credit moratorium:
    I. Creditors shall grant a moratorium on the repayment of credits without a mortgage guarantee.
    II. The moratorium shall be automatically granted by creditors for a duration of 3 months from the actual date of request.
    III. Prevent the creditor from claiming the credit installments with no interest accrued during the period.
    IV. Financial institutions under supervision that have granted moratoriums shall periodically submit certain information to the bank.

Similar to the mortgage moratorium, the consumer credit moratorium also applies for guarantors in a position of economic vulnerability.

3) Waiver to bankruptcy:
    I. Declaration of bankruptcy by the debtors will not be allowed during or at the end of the alarm state.
    II. The already submitted declaration shall be processed on preference basis.
    III. If any debtor has notified the court with jurisdiction over the declaration of bankruptcy over negotiation, it should be settled out of the court.
4) ICO guarantee facility scheme (guarantees to facilitate accessto liquidity for companies and the self-employed:
    I. 80% of new loans or credit facilities as well as renewals of pre-existing agreements of financing transactions 'to self-employed workers' or 'small and medium sized enterprises.'
    II. The financial institutions participating in the scheme agree to maintain the costs of the loans in line.

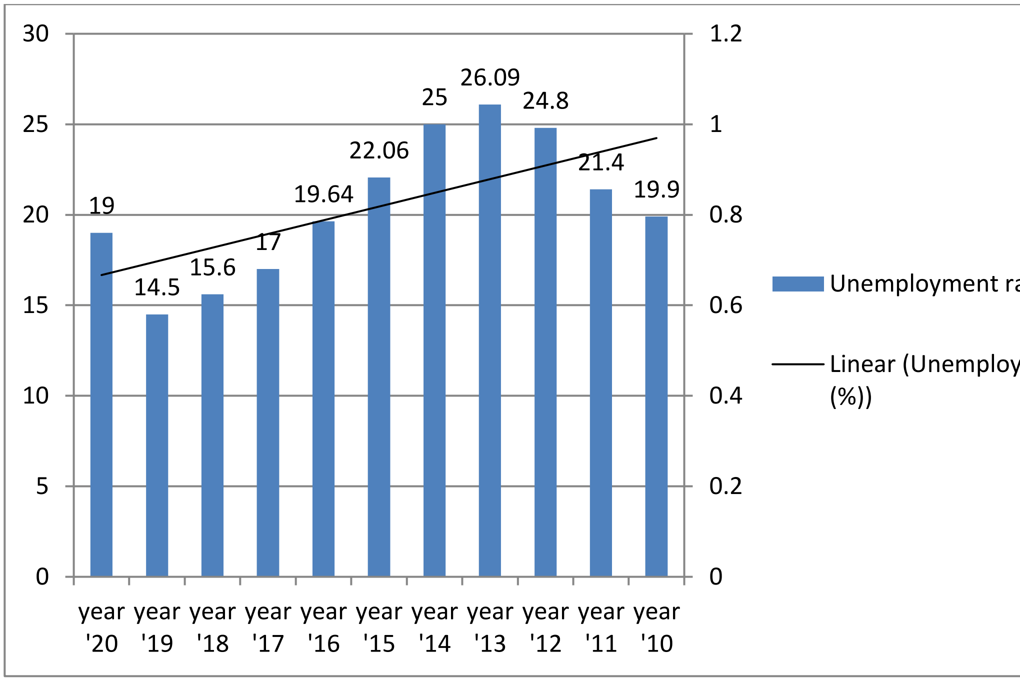
Administrative initiatives

The covid-19 outbreak has made it's impact on the country's jobless figures as graphical content was released by the social security department of their government. Spain's social security contributors had experienced a record dip of 833,979 during the month of march. The drop in the trend is nearly a forward impact from the covid-19 effect, as many enterprises have had to close down temporarily.

Earlier it's government predicted that the unemployment rate would reach 19 percent this year and its GDP would fall by 9.2 percent. The Madrid submitted Spain's new budget plan to the European commission, as the ministers warned that the virus had deeply affected the country's economic expectation.

Before the pandemic, all predictions pointed to a slight growth, a more stabilized and steady growth. But in the first half the shock of the virus has put in a sudden end to the growth. The covid-19 outbreak has taken its toll on the country's unemployment figures as shown in the statistics below.

YYYY	Unemployment rate (%)
2020	19
2019	14.5
2018	15.6
2017	17
2016	19.64
2015	22.06
2014	25
2013	26.09
2012	24.8
2011	21.4
2010	19.9



- The unemployed records a high of 4 million:

Tourism sector here is the worst affected with over 206,016 unemployed claims applied since the start of the lockdown. "In terms of regional dispersion, Andalucia has recorded the highest fall in its figures with 7 %, followed by Canary island with 6.24%, Murcia with 5% and Valencia with 6%. On the other hand, during the first 12 days of March, just 2,857 applied for unemployment status even days before the official lockdown commenced, but with the imposed regulations and restrictions, applications increased."

"Since March (the global pandemic), a total of 302,265 further applications were taken, totaling the country's total unemployed to nearly 4 million, putting Spain second only behind Greece in terms of the jobless. In an industry that equals 12 % of the country's GDP, travel restrictions and thousands of grounded flights have hit the sector potentially costing the country 4 billion in revenue."

- It's labor market thumbed on under the virus:

With the lockdown mode implemented in spain a long time ago and also adding on the allowing of only essential workers to work there has been a lost of around 8,00,000 jobs alone in March month. Among those unemployed group of genders, the women are the ones who are affected by huge margin. In the current situation their government has encouraged the businesses not to lose their staffs but provide alternative such as pay-offs as salary.

- A package of measures aimed at minimizing the negative impact.

The set of measures adopted by the Spanish government government represents a advanced response to the economic impact of the covid-19 and lays the foundations for ensuring that the negative effects on employment and the economic activity are temporary.

I. To favour the use of ERTEs, minimizing dismissals.
II. Internal workforce reductions is a new development.
III. Employees affected by an ERTE receive unemployment benefit amounting to 70% of their social security contribution base for the first six months.

Healthcare initiatives

As many European countries see a peak in corona virus cases and talks are about shifting to the next phase, it is important that the governments and health systems continue to build their capacity to avoid further escalation of this virus. The total number of people admitted in ICUs equals the number of hospital beds in the country which is 6000. Despite of it, their government assures that they have bought more beds for emergency.

Their primary focus is no longer on new cases but hospitalization so that the ICUs don't collapse. In response, health care workers in Spain have worked without rest putting themselves under difficult situations in order to treat the patient. This required the government to adjust its response and introduce strict lockdown measures, which helped the country to soften the spread of the virus.

- New medical equipment.

On the other hand about 5,000 domestically manufactured ventilators are expected. On April 8 2020, Madrid, UNICEF Spain has delivered a 1st batch of new medical supplies to the Spain health authorities to support the battle against the pandemic. The shipment included 48,000 batches of hand sanitiser and 7,200 gloves. More supplies such as 418,000 masks, 1,042,000 gloves, 100,000 detection kits, 1,000 pieces of personal protective equipment are yet to be supplied.

"The hardwork in Spain is part of UNICEF's global covid-19 response, working with the WHO through the historic covid-19 unity response fund, promoted by the United Nations Foundation and Swiss Philanthropic foundation."

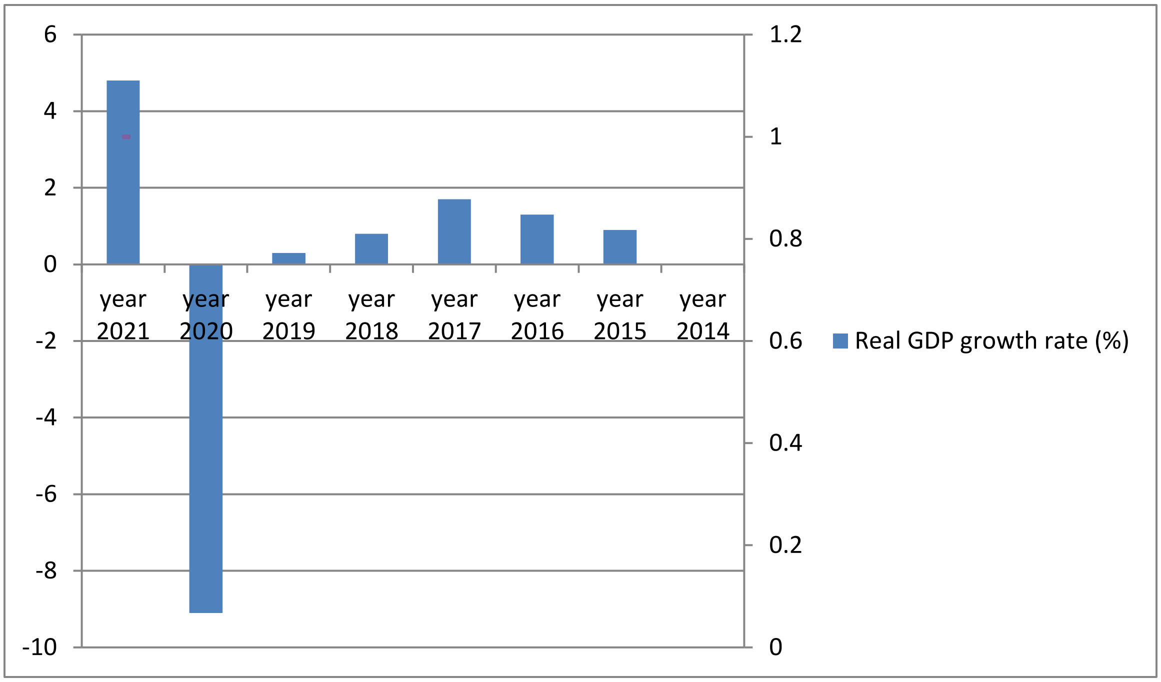
Initiatives to combat covid-19: Italy

Socio-economic initiatives

The global covid-19 pandemic caused large economic damage to the Italian economy. The sectors such as in the case of "tourism, hotels and catering services were among the hardest impacted by foreign countries limitations to travel to Italy, and by the nationwide lockdown announcement by the government on 8th March. On 12th March, the Italian stock market was among the worst hit when the FTSE MIB index lost 17% of its value in one day."

The economist predicts a negative GDP decline for Italy in 2020 as shown below in the table;

Year wise forecasts	Real GDP economic growth rate (%)
Year 2021	4.8
Year 2020	-9.1
Year 2019	0.3
Year 2018	0.8
Year 2017	1.7
Year 2016	1.3
Year 2015	0.9
Year 2014	-0.01



"Economist Alberto Bisin predicted that Italy's debt-to-GDP ratio would rise from 130% to 180% by the end of the year, due to borrowing and losses. Although the pandemic has impacted the northern Italy hardest, economically poor areas of southern Italy are suffering the most from the lockdown. Many residents of those areas work in the grey economy and are therefore not eligible for unemployment benefits."

A collective letter to the council of the EU was sent on "25 March by Italy together with Belgium, France, Greece, Ireland, Luxembourg, Portugal, Slovenia, and Spain, sent calling for the issuance of a new common debt instrument, nicknamed in the media as "Eurobond" or "corona bond", to help funding the measures taken against the corona virus pandemic and the expected economic downturn to follow."

Day wise economic activities of Italy for the month of March:

- On 4th March, their government announcement shutdown of all schools and universities nationwide.
- On 5th and 8th March, the government agreed to lockdown lombardy and 14 other provinces involving more than 16 million people.
- "On 9th March, the government announced that all sporting events in Italy would be cancelled."
- "On 11th March, the government allocated 25 billion euros for the emergency."
- "On 21st March, conte announced further restrictions within the nationwide lockdown, by halting all non-essential production, industries and businesses in Italy."

- On 6th April, “the government announced a new economic stimulus plan, consisting of 200 billion euro.”

This very pandemic has a devastating impact on the Italian economy, as industrial output fell vertically. Italy had a considerable position in the value of industrial production in the EU member states. As per the International Trade Administration (ITA), Italy’s third-largest destinations for exports is the US, which totaled $50.1 billion value of the country’s exports to the US in 2018. As Italy’s economic formation is fully dependent on SME’s the spread of the pandemic is significantly affecting the economy of Italy. In the middle of the covid-19, SMEs operations are negatively affected, which in turn, is leading to a significant decline of the Italian economy.

Italy is one of the most affected country by the pandemic virus. It had an acceptable position in the value of industrial production in the EU member states. The country consisted for nearly 2.4% ($2.1trillion) of the world’s GDP in 2018. Italy’s lockdown was described as the largest lockdown in the history of Europe, as well as the most aggressive response taken after China.

Financial initiatives

Italy’s covid-19 stimulus package was said to reduce the impact on the economic by somewhat a smaller margin. The package plan was worth 55 billion euro. In order to pay the salary to the workers who had lost their jobs due to the current situation the government had included it in the stimulus package. A compensation scheme would help the small companies with very low turnover which was hit by the lockdown. The government had made a prediction that if they they are unable to increase the recovery than they would see a contraction in their GDP any time soon. On public finances, the budget deficit is seen falling to 5.7% of GDP in the year 2021, while the debt is targeted to decline to 152.7%. Italy has penciled in an automatic increase in sales tax due to in next year January. The government might simply forego the revenues from the tax hike if there is risk hurting the already weakened economy.

- How the global financial crisis could begin Italy.

“Italian economy has been brought to a sudden pause by the nationwide quarantine imposed earlier. Further more its’ government tightened the lockdown announcing that all stores, except for pharmacies and groceries to be closed.” The businesses could run low and households may stop repaying their bank loans. “At the same time, the government bonds that make up a bucket of bank assets may lose value as Rome’s costly spending frightens investorsSince mid-february, The interest rate that Italy pays on its government bonds has increased even as countries such as the United States and Germany have seen their borrowing costs fall. Likewise, investors now must pay twice as much to assure their government securities against a potential Italian default.”

"Italian banks have thinner capital cushions than the average continental bank and hold more than twice as many bad loans. The banks as a whole own about one quarter of Italy's 2.4 trillion dollar outstanding government debt. The Italian government says it plans to mortgage payment holiday, which should help businesses and consumers, although it may require public help to recover the loss to banks. But officials have yet to provide details. Financial weakness is concentrated in Italy's regional banks, which lack the same links to global finance."

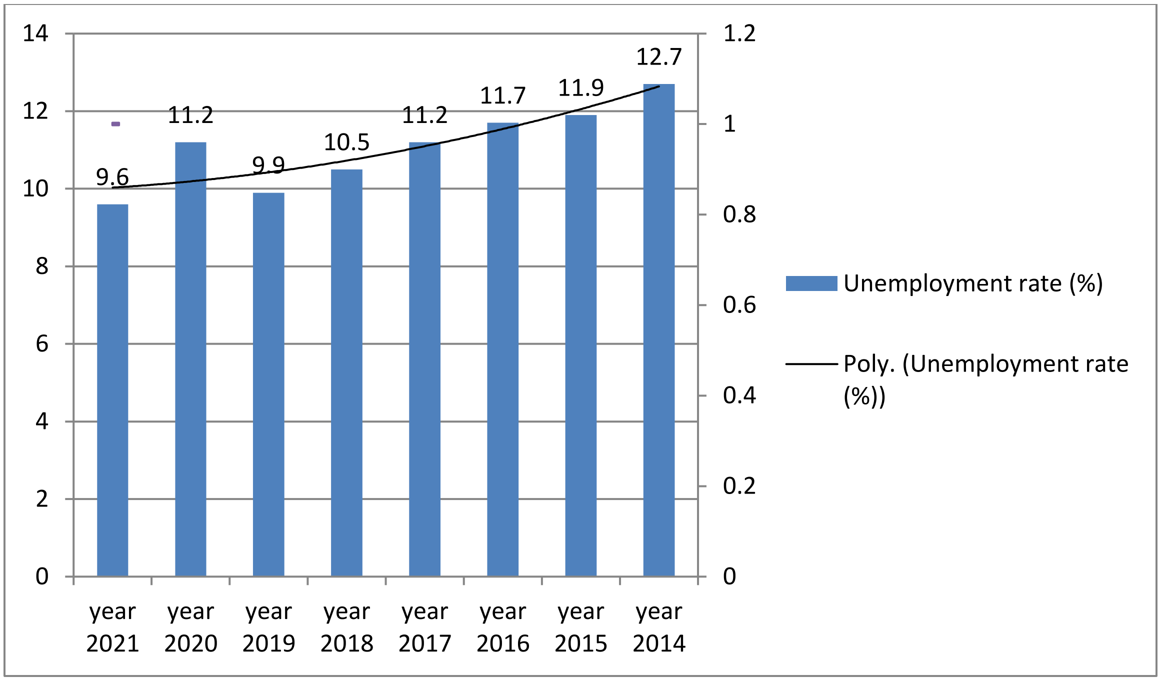
Administrative initiatives

According to a prediction from March 2020, the unemployment rate in Italy could reach 11 percent in 2020, due to the impact of the corona virus (COVID-19) outbreak. It is expected that the worst hit in Italy would be the hotel and catering sectors causing a fall in terms of consumption value.

In month of March, the unemployment rate in Italy went down to 8 % which is the lowest for almost 9 years. "Nobody must lose their job because of the corona virus," Italian economy minister Roberto Gualtieri said. The government has promised around 75 billion euros of support for families and companies. The unemployment rate, measuring between 15 and 24 years old, fell to 28% from 29% to post its lowest level since October last year.

Below is the unemployment rate of Italy with diagram;

Year wise forecasts	Unemployment rate (%)
Year 2021	9.6
Year 2020	11.2
Year 2019	9.9
Year 2018	10.5
Year 2017	11.2
Year 2016	11.7
Year 2015	11.9
Year 2014	12.7



- The scare of Covid-19 on the job seekers.

Italy's unemployment rate went down steeply to 8.4% in the month March, the lowest for almost nine years, data showed on Thursday, as people quit looking for work due to the virus fear. Febraury's jobless rate was revised down to 9% from a previously reported 9.7% national statistics bureau ISTAT reported. In March alone, 267,000 fewer people were looking for work than in the month before. In the first quarter as a whole, some 94,000 jobs were lost compared with the previous three months.

- Measures in support for employees.

I. "Paid and unpaid leaves for parent-employees and employees who are helping disabled family members."
II. "Monetary support for companies purchasing protective devices and equipment.
III. A bonus of 100 euro for employees who have been working at the company premises during the lockdown.
IV. The possibility to apply for wage supplementary fund.
V. Optimization of smart working arrangement by applying work from anywhere.
VI. Employees with children aged 12 years and below are entitled for 30 days of paid permits and employees assisting disabled family members are entitled to a further 12 days of paid permits.
VII. Body temperature devices to be maintained at all cost by the employers.
VIII. Outdoor business business trips to be replaced by voice calls or video call conference."

Healthcare initiatives

“Italy has one of the best public health care system in this world. Its health worker are well trained. During the outbreak of this virus, they knew that they were prepared to deal with it but still failed to do or prevent what happened that follows. More than 2,500 people have died in about 28 days in Italy. With over 31,500 confirmed cases. Since the time the new virus was identified, northern Italy has emerged as a warning about what can happen even in a region that is considered to have one of the most skilled public health care systems in the world.”

“In early March, as deaths from the virus increased and the number of confirmed cases went up, Italy’s government needed to take right steps to bring down this rapid spread of the virus. On March 8, PM of Italy issued a lockdown of Italy’s Lombardy region quarantining 16 million people. Two days later, he expanded the quarantine order to include the entire country.”

Depending upon the cases, “doctors typically take into account a patient’s age and condition, which is stranded practice even without being in the midst of a pandemic.” In the majority of cases corona virus hits elderly people more violently, especially those affected by other diseases. Even though the death rate due to the virus is also higher than in other countries, but it is still claimed that the Italian health system continues to be one of the best.

- Italy’s health care standard during the pandemic.

Firstly, In addition to standard hospitals, there are others where only covid-19 positive patients are treated in order to rule out any possibility of contagion between them. Secondly, many buildings have been turned into Covid hospitals and many new hospitals have been created as well. Intensive therapy has gone from 5,300 to over 8,000 intensive care beds in pneumology and infectivology also have gone from 6,625 to 26,169 units. Even a wide range of textiles and manufacturing firms converted their production to fight corona virus all together to produce face masks and medical clothing.

- New challenges to its health care system.

Before the virus being declared as pandemic, the health services in Italy, were as well focused on individual care. But since the outbreak of the virus at a wide range they have to start thinking about their health care system in an outbreak context. The first step in tackling an outbreak like this is the protection of frontline staff who are falling ill protecting the patients across. Another major things is that the elderly people are at huge risk from the virus. The goal was to limit the infections, stave off the epidemic and learn more about the nature of the enemy. Respirators become rare resources, and officials propose converting abandoned exposition spaces into vast intensive care wards.

Recommendations and Conclusion

The present Covid19 outbreak should start a careful detection of the reserve capacity needed to manage an epidemic comparable to the so-called Spanish flu of 1918, which had the same impact just like Covid 19. "In order to assess the possible impact of the Covid 19 on the global economy, beside concentrating on the how far the virus can go but also on the ways that consumers, businesses and government may respond to it." "This virus will most directly shape economic losses through supply chain disruption, diminishing demand, and a financial downturn by affecting business investment, household consumption, and international trade. This makes it hard to assess the effects on supply chain and demand down turn discussed above. But if these effects are difficult to evaluate, businesses will not know whether they should continue or not." The next step here is to determine on how to break the chain of this pandemic virus and not to wait for a vaccine to come which is a long way from today. This might begin with a public-private task force, chaired by the secretary of health and human services. The only recommendation here would be to increase number of testing and widen the area of testing per day so, in order to bring down the sky rocketing covid-19 numbers. The best example in this case would be Maldives which has the highest number of covid-19 testing within the SAARC region.

References

Tanne, J. H., Hayasaki, E., Zastrow, M., Pulla, P., Smith, P., & Rada, A. G. (2020). Covid-19: how doctors and healthcare systems are tackling coronavirus worldwide. *Bmj*, *368*.

Stock, J. H. (2020). *Data gaps and the policy response to the novel coronavirus* (No. w26902). National Bureau of Economic Research.

Gormsen, N. J., &Koijen, R. S. (2020). Coronavirus: Impact on stock prices and growth expectations. *University of Chicago, Becker Friedman Institute for Economics Working Paper*, (2020-22).

Montgomery, A. L., Zarnowitz, V., Tsay, R. S., &Tiao, G. C. (1998). Forecasting the US unemployment rate. *Journal of the American Statistical Association*, *93*(442), 478-493.

Moagar-Poladian, S. (2020). The Coronavirus COVID-19 Pandemic Crisis and its Impact on the EU Economy. *Global Economic Observer*, *8*(1), 7-10.

Armocida, B., Formenti, B., Ussai, S., Palestra, F., &Missoni, E. (2020). The Italian health system and the COVID-19 challenge. *The Lancet Public Health*, *5*(5), e253.

Coates, B., Cowgill, M., Chen, T., & Mackey, W. (2020). Shutdown: estimating the COVID-19 employment shock. *Grattan Institute, Melbourne, Victoria*.

Research paper: part 2

On

“How the Covid-19 turned from being an imported case to a global pandemic”

Acknowledgement

While doing research on this paper i had to face a little hurdle because I was trying to complete it within a short span of time keeping in mind the very minimal time left for me for this. Unlike my previous research work, in this one I got the support of my parents not on knowledge basis but on encouragement basis. I would like to thank the most important person without whom I would had not been able to complete it fast. The person is my neighbor who had lend me his laptop as my own laptop was damaged by water. The last one I would thank is AI (artificial intelligence). By that I don’t mean a robot but by it I mean various websites and my mobile app in particular. The above are the only lists I have to thank in being able to complete my research paper.

Acronyms/Abbreviations

1.	AI	Artificial Intelligence.
2.	Covid-19	Corona virus 2019.
3.	SARS – CoV-2	Severe Acute Respiratory Syndrome – Corona virus
4.	U.S.	United States
5.	U.K	United Kingdom
6.	WHO	World Health Organization
7.	CDC	Center of Disease Control
8.	SMEs	Small & Medium Enterprises

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Introduction

Covid-19 scientifically known as SARS-CoV-2 got its name from the Spanish flu in 1918 also known as the SARS-CoV-1 during that time. Spanish flu was just like Covid-19 which had infected half a million of people around the world. Covid-19 is also just like the Spanish flu but it is much more deadlier than it in terms of the infection rate and the total number of population it has infected in and around the world. The SARS-CoV-1 was originated from Spain where as the SARS-CoV-2 is from main land china. The source of transmission of the virus is still unknown and experts are trying their best in extracting the root of the virus. But other sources points out that the virus came out from live animal market in wuhan, china. This research paper focus on the characteristics and gives a brief summary of this virus and onto how the different cases such as its first case, its first death case and how its first imported case lead to other transmission types. This paper also gives a glimpse on the current situation of the three focus country namely U.S., Italy and Spain, on how are they doing. Presently the virus had infected more than a million people and the rate at which the virus is spreading seems like it wont be stopping any time soon. When some countries are already experiencing its second wave of the virus, there are few other countries which are experiencing yet to experience its second wave.

Abstract

The novel corona virus 2019 which was later known as Covid-19 and also scientifically known as SARS-CoV-2 became the main cause of millions of cases and hundred thousands of death around the world. It was considered even more worst than the 1918 Spanish flu which had infected hundred thousands of people around the world. It caused a lot of Socio-economic destruction of every nation it infected. Some nations are with only imported cases only because of it's stringent measures and integrity among the fronline workers. But there are nations who failed to put a brake on the virus from turning into a community transmission only because they were fighting among themselves rather than fighting the virus. One thing is sure that the countries which got hit big time by the virus where all imported either by tourists or by their own people who had returned from an infected country. Currently those some countries which was once the worst affected in the world are now doing good due to various measures implemented whereas some other countries are still fighting with it every single day. This virus is showing no sign of stopping, with each passing time it is coming up with lots of complications. Experts say that this virus will be the type of virus which would come back again every year and the world should get used to it.

Literature review

Since the time of the outbreak of this virus there has been a lot of expert views and data analysis with regard to this pandemic which had led to vagueness in terms of getting into the main catch of this deadly virus. Based on various literatures there has been cause of concern over how far the population will have to live on with this pandemic. The most common and important questions raised by the growing population is about when a vaccine will be made and which country will be the first one to make. As said by a WHO officials that the Covid-19 will bring a second wave which will be far more devastating than the present wave. Recently some analysis has shown that the spread of the virus is airborne rather than aerosol.

Methodology

Based on the various Covid-19 figures and data obtained from the websites, the percentages of cases were used to create the graphical format and the pie diagram in order to be able to show infection rate of the virus. I carried out an online collection survey of different images and clinical data to be able to reflect down on my paper the association of my work patterns with the demographics, the timing in relations to the symptoms of the virus, and also the severity of this pandemic. Some few ideas were taken from the various new channel in being able to merge my own idea with the already existing idea. One method which I could have taken but could not take due to time shortage is by preparing a predesigned questionnaire survey which could have given me a primary source for my paper even though this paper was based upon secondary source of information keeping the various restrictions imposed in the country and around the world.

Transmission types

1. Imported case: Those cases that are identified as being carried from another infected country or during transit.
   “If a person who had just returned from another country, tested positive for the virus than he/she will be considered as an imported case”.
2. Cluster transmission: It has been used to identify infections that are largely concentrated in a limited locality, often within a family and its extended circle. In such cases the source of infection is known and can be traced back even if someone outside the family has tested positive.
   “If one man from a family has travelled abroad and he transmits the infection to other family members or his extended family, it can be characterized as a cluster of infections. In such cases, the source of the infection is known and can be traced back even if someone outside the family has tested positive.
3. Community transmission: It is evidenced by the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through sentinel samples.
   “Many groups of individuals has tested positive and the source of the transmission unknown unlike in the case of cluster”.
4. Sporadic transmission: A sporadic transmission is defined as a case of legionnaires disease that was not part of an identified outbreak.
   “A person has tested positive but was either hospitalized before the pandemic or was from before the outbreak”.

When WHO’s director-general Tedros Adhanom Ghebreyesus announced that the Covid-19 was a global pandemic, he said, “if countries detect, test, treat, trace, and mobilize their people in the response, those with a handful of Covid-19 cases can prevent those cases becoming clusters, and those clusters becoming community transmission.

Covid-19 in the United States:

First case

The first case of the virus came in the U.S. on January 20, when a man who returned on January 15 after visiting his family in Wuhan, china, to his home in Snohomish country, Washington. He sought medical attention on January 19 for Covid-19 test.

First death

The earliest reported case of death due to the Covid-19 occurred on February 6 in Santa Clara County, California, when a woman aged 57 died caused by the virus with added complications which led to ruptured heart. This case was only confirmed months later. She had not traveled any international location which indicating that she contracted the virus from within the boundary.

After that by May 5, U.S. reported 9 deaths due to the virus which had happened before February 6.

Transmission type: community transmission

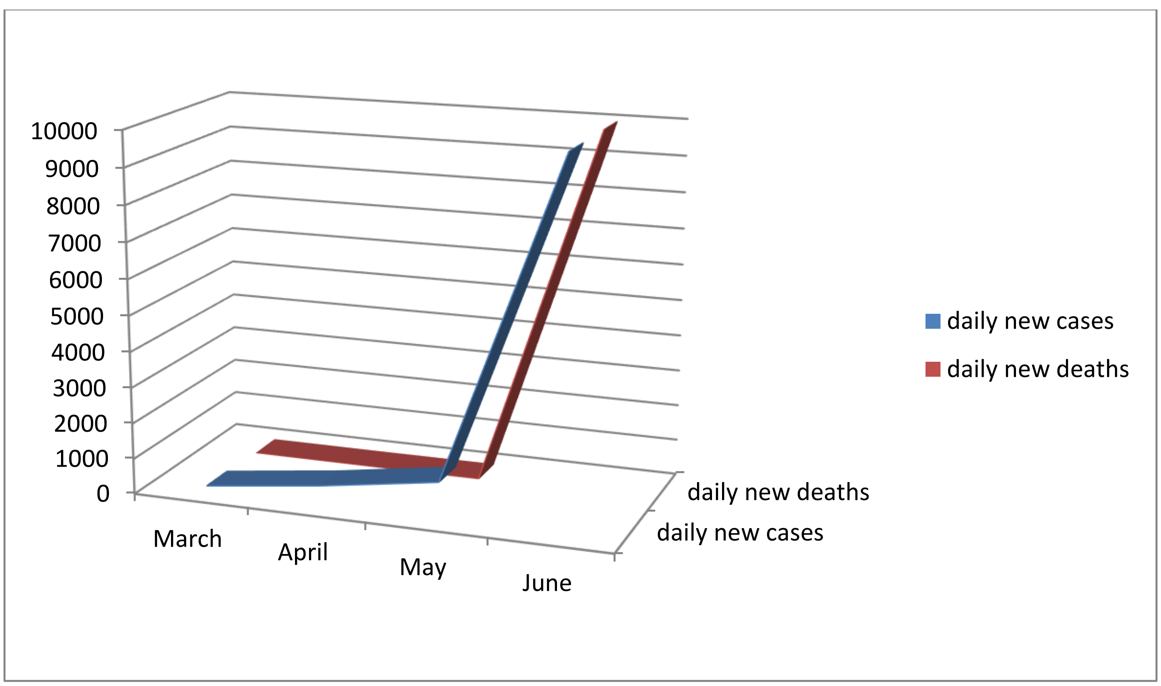
The second case came on January 24, in a woman who has returned to Chicago, Illinoise, in January 13 from visiting Wuhan. The woman had passed the virus to her husband, and then it was the first reported case of local transmission in the U.S. The same day WHO declared the outbreak a Public Health Emergency of International Concern, warning that "all countries should be prepared for containment." Although by that time there were only 7 reported case of Covid-19 in the United States. The very next day, January 31st, the U.S. also declared a public health emergency.

Current situation

As of 16 July, 2020 the U.S. had a total of 3,483,832 infected with more than fifty thousand cases coming up daily. It's death rate was 1,36,938 as of the same date. Due to the "black lives matter" protest their cases has seen a further increasing. Even though their administration talks good results in terms of the number of recovery when compared to the beginning but still every individual in the U.S. knows that the situation is far from over in their territory.

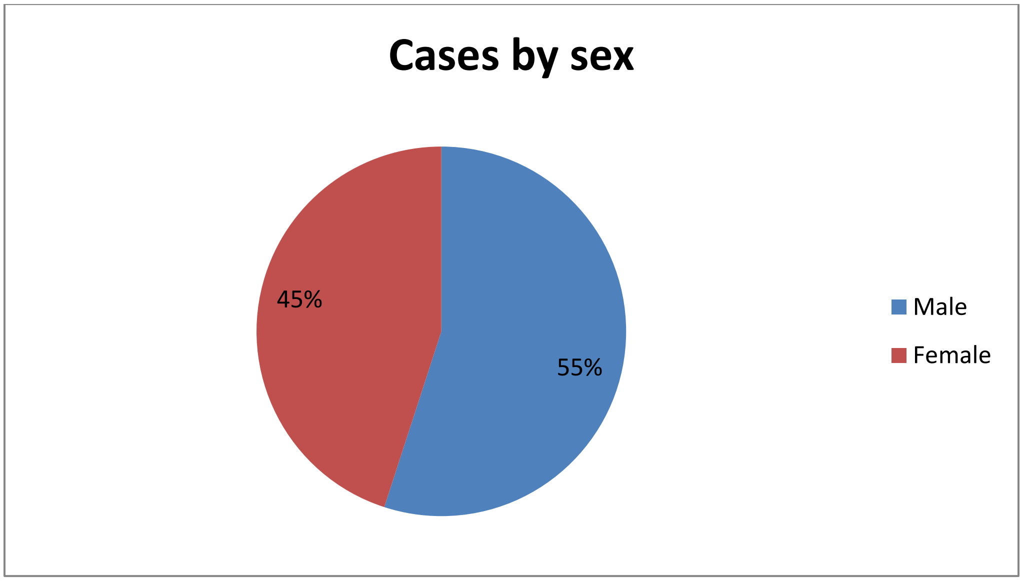
The graph format of the virus in the U.S.:

(The graph is based on estimation keeping in mind the rise in the cases)

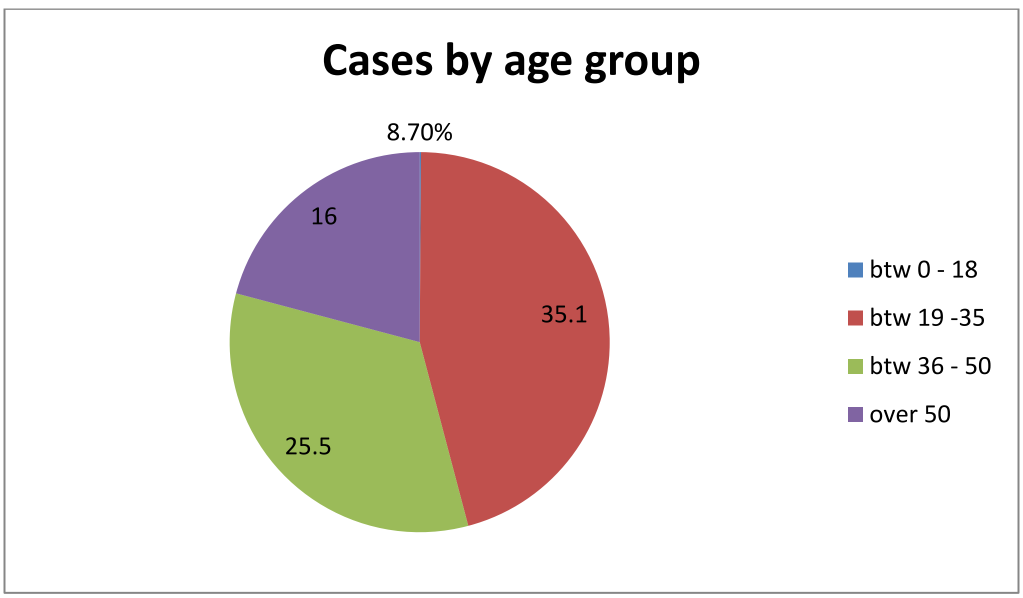


The graph above throws at us the total daily new as well as death cases of the virus starting from the month of March till June. It shows two different colored horizontal lines red and blue with the red indicating daily new deaths and blue representing daily new cases.

Covid-19 data in terms of age group in the form of pie chart



The aforementioned pie diagram focuses on the corona virus infected cases by sex. The pie has been divided into two parts with one part representing male and the other part representing female.



The pie diagram above lights on the total cases coming out of the virus infection in terms of four different age groups. The pie has been divided into four slices of dissimilar color.

Covid-19 in Spain

First case:

The first ever infected case was found in the month January when a German tourist was caught with the virus. It was the country's first imported case. Analysis shows that Spain had over 15 such imported cases found during that month. Since then until the month of March the virus had spread to over 50 cities within Spain only. Following day all important workers were being advised to stay home quarantine for atleast 14 days in order to contain the virus.

First death:

Spain recorded its first death case during the month of March which is the same period when the virus spread to over 50 cities across Spain. The death rate in Spain surpassed the death rate of china since its first case. Despite of the various health measure implemented their death rate continued rising. 950 individuals had recorded to be killed by the virus in a single day during the month of April. It was only due to its restless efforts that on 17 May it had a fall of death rate per day by 100 for the first time.

Transmission type:

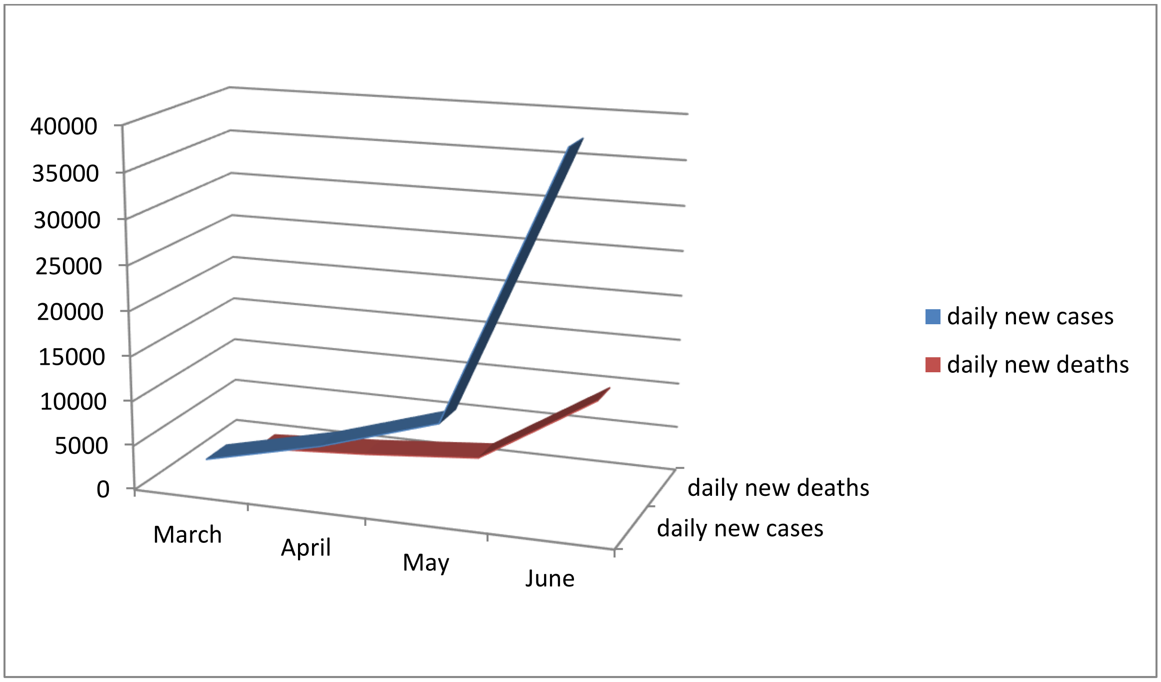
From its first case of imported virus till its first death by the virus, Spain had transitioned from a type of imported transmission to a mass community transmission of the virus. When the unexpected virus was first caught the Spanish government took it lightly by assuming it as a normal flu which comes and goes away by a simple treatment. But until the times that they realized the impact of the virus, it had done a lot of damage across the nation resulting in a community transmission making it difficult for the government to track down the source of the virus.

Current Situation:

The infection rate of the virus has fallen previously in Spain with its state of alarm ending on 21 June. When its government opened its international border for incoming tourist the case again started to increase despite of measures put in. Most of the cases were from the United states. For that reason the Spanish government had decided to let in and out only those individuals who either works in Spain and who come to help them with the virus pandemic. The latest news as on 19 July was that the infection level in Spain dropped is now increasing like before.

The graph format of the virus in Spain:

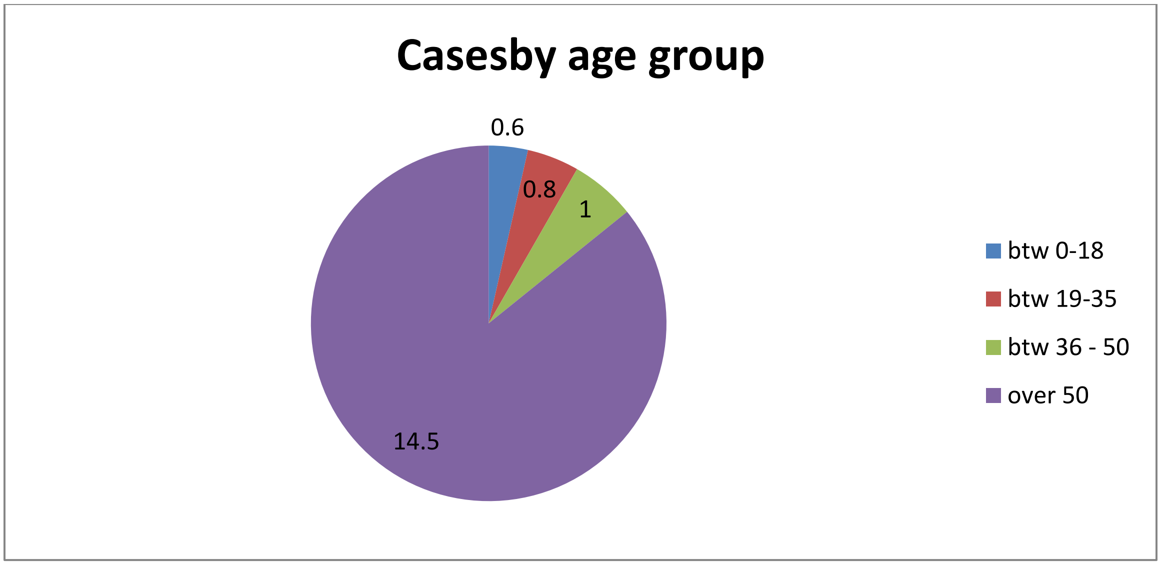
(The graph is based on estimation keeping in mind the rise in the cases)



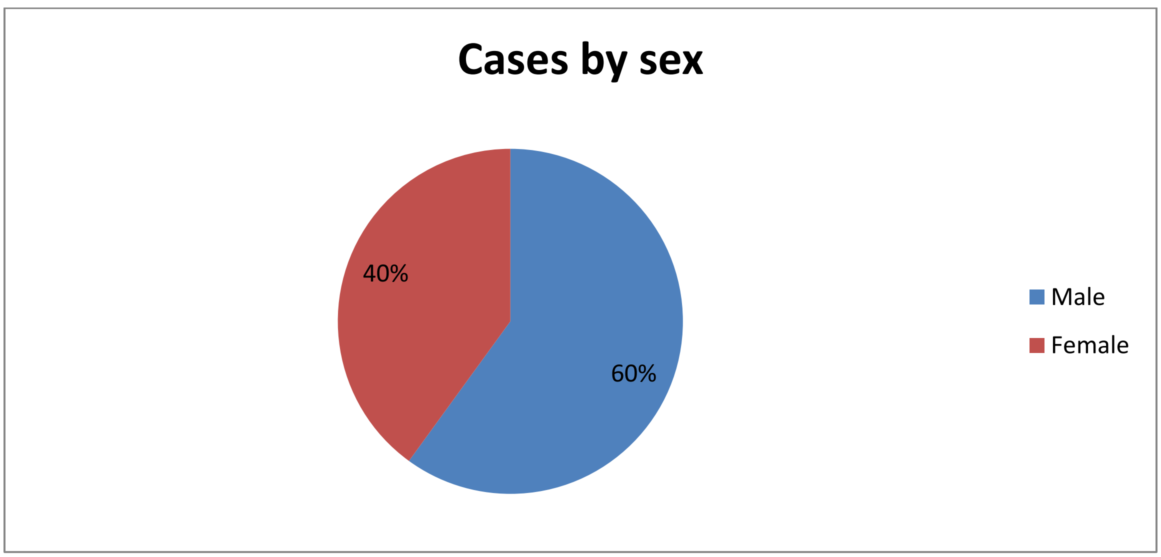
The diagram above reflects the total number of new infected cases and as well as the total death cases from the month of March till June in the form of blue and red.

Despite of the continuous rise in cases, their government saw a decline at the end of June and in the beginning of July.

Covid-19 data in terms of age group in the form of pie chart



The pie chart above represents the total cases of infected persons in terms of their age groups in different colors as reflected in the pie. The pie has been represented with four different colors.



The diagram above illustrates the over all cases of corona virus by sex. It has been divided into twoparts with one part representing male and the other female.

Covid-19 in Italy

First case

The first case of the virus was detected in a two Chinese tourists in the month of January. Later after a week an Italian man who came forward with flu like symptom but was later confirmed as being infected by the virus. Then in the next 24 hours after the first case of infection Italy recorded around 36 new cases which didn't have any connection with the first case. It was not able to detect whether the first infected person was imported or not.

First death

Its first death case out of the virus was confirmed in a 78 old man who had been admitted in a hospital for 10 days doing treatment for the virus. The death case was reported a week after their government imposed lockdown. Until July Italy reported a total of around 35000 death cases due to the virus with around 600 deaths being recorded on daily bases.

Transmission type

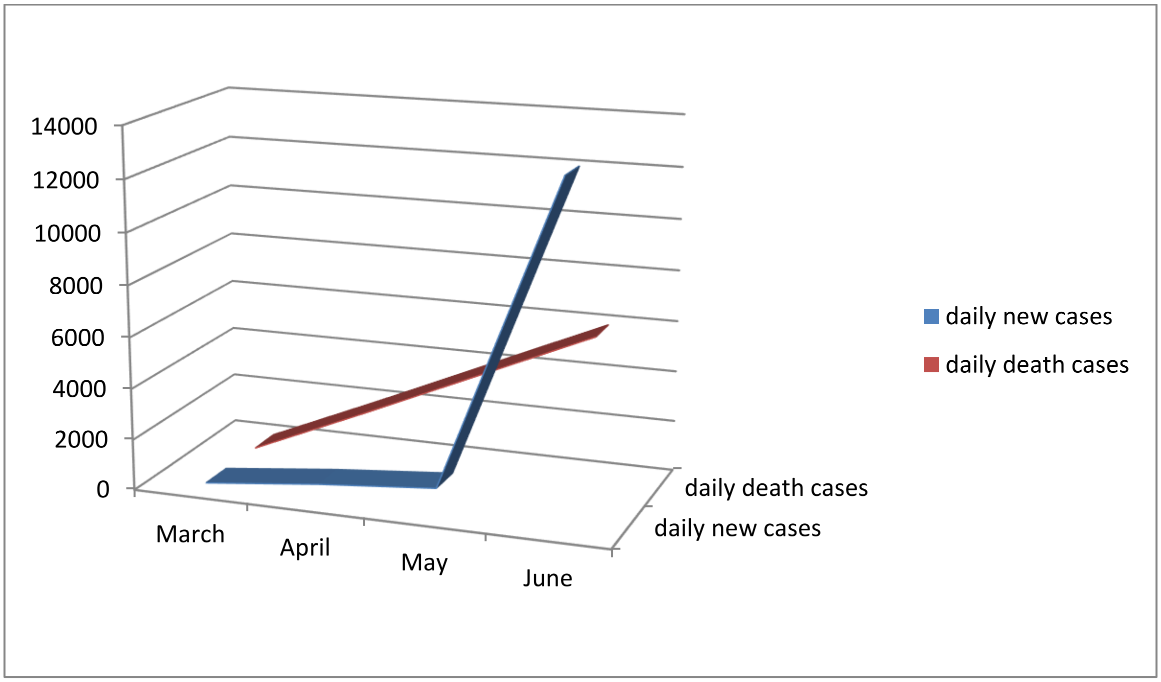
Its first type of transmission was imported from china in two tourists. Its second reported cases of 37 individuals was within its territory but none of them had any sort of connection with each other which was the beginning of clusters of cases. Since then 16 more cases were detected. As the source of those internally reported cases were not known the Spanish government declared that they were experiencing community transmission of the virus.

Current situation

Previously when the Italy was first infected by the virus it quickly turned into one of the worst hit in the world beside china. Due to its best effort and various measures Italy's Covid-19 active cases has dropped down to around 14000 from a total case of 35000 as of 13 July. Since then it has been seeing a considerable drop in its cases due to its increasing number of test performed per day.

The graph format of the virus in Italy:

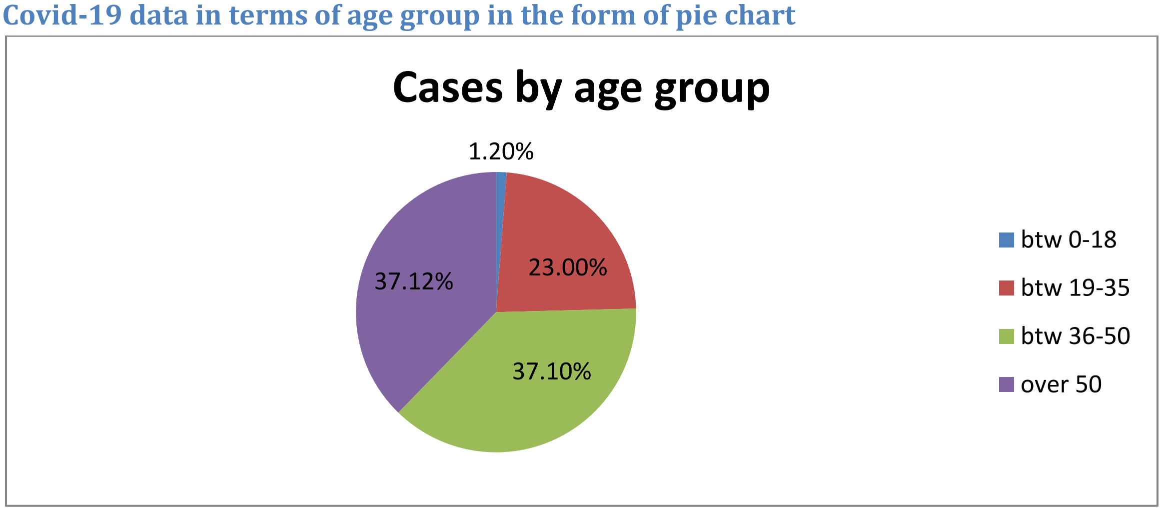
(The graph is based on estimation keeping in mind the rise in the cases)



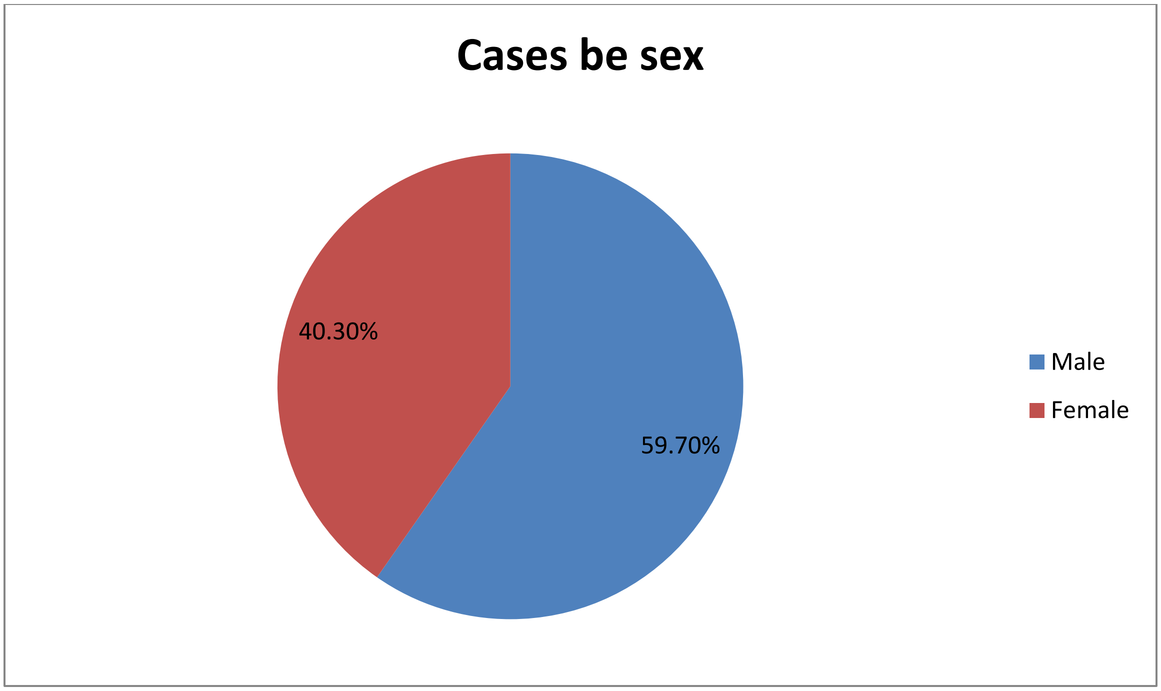
The graph above represents the total daily new/death cases of the covid-19 from the month of March till June.

July month saw the decline in its over all cases from the virus. Even though it has done millions of tests till date but the exact number of tests performed has been unknown.

Covid-19 data in terms of age group in the form of pie chart



The pie diagram above shows the number of corona infected individuals with respect to its age groups. The various slices of colors indicates the percent of cases in different age groups ranging from 0 – 50.



The diagram above shows the total cases of infected individuals in terms of their sex. The two different slice of colors namely red and blue represents male and female respectively.

Covid-19 timeline: Its global wide spread

The novel corona virus 2019 commonly known as the Covid-19 and also scientifically known as the SARS-CoV-2 is a pandemic virus which has stopped the life of billions. It originated from china in the beginning and spread to a wide range within a short span of time. Below is the timeline of how this virus spread during the course of time.

Sl. No.	Date/year/month	Country trapped
1	12/31/2019	An alien like pneumonia infected many in the mainland of China three days after its new year.
2	11/01/2020	China declares the pneumonia like disease as Covid-19 along with its first death because of it.
3	21/01/2020	1st case of the virus imported in the U.S. by a resident of their own people coming from china.
4	23/01/2020	1st ever lockdown imposed in wuhan, china.
5	30/01/2020	WHO declares the virus has a global pandemic after the virus had infected people living across the border.
6	05/02/2020	Diamond princess cruise ship was quarantined

		along with more than 3600 of its passengers as well quarantined.
7	11/02/2020	The virus was named as Covid-19.
8	26/02/2020	United state had entered into local transmission with its first case.
9	29/02/2020	United state reports its 1st ever death by the virus.
10	03/03/2020	Testing for the virus by the CDC which was previously allowed for only those who had returned from an infected country or place was made open of all after it started infecting internally.
11	15/03/2020	After the local transmission started in the United states its president declares national emergency.
12	17/03/2020	The virus had spread to over 50 different countries.
13	18/03/2020	For the first time china reports zero infection from the virus.
14	19/03/2020	The death toll Italy reaches a record high, even higher then china.
15	20/03/2020	New York city was being considered as the epicenter of the virus in the U.S.
16	24/03/2020	Olympic 2020 which was suppose to take place in Japan was being postponed due to the virus.
17	24/03/2020	The pandemic situation lead to the world's biggest lockdown which was being announced by India (21 day strict lock down)
18	26/03/2020	For the first after china, United state became the worlds highest number of Covid-19 infected country with cases spiking each passing day.
19	27/03/2020	The president of the United state sign a huge $2 trillion stimulus bill mainly for the SMEs , those companies whose business are getting affected at large and also for the frontline workers.
20	27/03/2020	It was a stressful news for the people of the UK when their prime minister Boris Johnson tested positive for Covid-19.
21	02/04/2020	The world Covid-19 cases passed 1 million mark.
22	21/04/2020	After the fact examination revealed that U.S. first covid-19 death happened earlier to a different person than the one who was reported as it's first death.

Recommendations and conclusion

Unlike those viruses such as Nipah, Zika and Ebola, this one proved itself as the most life threatening virus of them all even far more deadlier than the 1918 virus known to the world as the Spanish Flu. This virus also known as the Covid-19 is regarded a merciless virus that has not only stopped the daily routine life of all the population around the world but also infected more than a million of them and killed hundred thousand. This virus is not going to have a full stop at any moment or time. For some countries their current situation had shown a tremendous improvement in fighting off the virus but for some it has been a complete nightmare with the virus infecting and killing people on its way. My only recommendation here would be to come up with stringent measures focused towards health care and frontline workers. As advised by the WHO that we should maintain social distancing at all times, use proper face mask in gathering and always wash our hands with soap for atleast 20 second. The other measures could be to do as much test in a day as possible in order to reduce the number of daily spike.

References

https://indianexpress.com/article/explained/what-is-community-transmission-covid-19-delhi-6450704/

Che, D., Decludt, B., Campese, C., &Desenclos, J. C. (2003). Sporadic cases of community acquired legionnaires' disease: an ecological study to identify new sources of contamination. *Journal of Epidemiology & Community Health*, *57*(6), 466-469.

Omer, S. B., Malani, P., & Del Rio, C. (2020). The COVID-19 pandemic in the US: a clinical update. *Jama*, *323*(18), 1767-1768.

Remuzzi, A., &Remuzzi, G. (2020). COVID-19 and Italy: what next?. *The Lancet*.

Remuzzi, A., &Remuzzi, G. (2020). COVID-19 and Italy: what next?. *The Lancet*.

Ceylan, Z. (2020). Estimation of COVID-19 prevalence in Italy, Spain, and France. *Science of The Total Environment*, 138817.

Holshue, M. L., DeBolt, C., Lindquist, S., Lofy, K. H., Wiesman, J., Bruce, H., ... & Diaz, G. (2020). First case of 2019 novel coronavirus in the United States. *New England Journal of Medicine*.

Giovanetti, M., Benvenuto, D., Angeletti, S., &Ciccozzi, M. (2020). The first two cases of 2019-nCoV in Italy: Where they come from?. *Journal of medical virology*, *92*(5), 518-521.