Advanced Digital Health Care Information Sharing for Covid19-Version 2.0

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Abstract

The COVID-19 virus has been linked to an acute outbreak of the disease that has passed for years. Clear explanations of these should be provided by trained professionals and those with healthcare experience who have the energy to work on intensive care. The World Health Organization (WHO) has taken various steps to address this. These can be audited by NETCCN (National Emergency Telecritical Care Network) using digital technology. This section explains a lot. It is proposed by the National Emergency Telecritical Care Network (NETCCN). This digital health information will be solved as an updated version 2.0, which will greatly improve future emergencies. The proposed method of digital predication support for Artificial Intelligent (AI). Use these to learn historical information about the virus. This technology can detect telemetry, complex maintenance robotics and monitoring intelligence. These can be developed to integrate multiple virus-related information. All of these will be coordinated by health professionals. Frequently testing should be done to ensure continued readiness to protect against emergency disasters.

1. Introduction

COVID-19 or Coronavirus disease 2019 is spreading rapidly around the world. April 3, 2020 until, COVID 19 1,002,818 people worldwide infected and caused the deaths of 52,571. In India alone, 4069 cases and 53 deaths were reported up to 2020. With the sharp increase in the number of attacks occur, COVID 19, which is increasing the number of pregnant women and children is a matter of concern. Coronavirus (CoV) family including viruses that cause the common cold, but in some cases the cause of serious diseases such as Severe Acute Respiratory Syndrome (SARS-CoV), Middle East Respiratory Syndrome (MERS-CoV) and currently SARS-CoV-2.1 COVID 19 1The new strain of SARS Coronavirus-2 Coronavirus for the pathogen first detected in Wuhan, 2019.2 severe respiratory syndrome in China (SARS) or, coronavirus beta corona like SARS coronavirus bats, their most common ancestor 19 HKU9-1.3According reported to be transmitted person to person, mainly through droplets and contact. COVID 19 often causes mild to moderate human respiratory illnesses and infections usually do not require any special treatment to recover. The risk is higher in populations that are particularly those with the presence of diabetes, heart disease, respiratory problems, cancer or any other immune suppression based diseases. Thus, an increase in the number of deaths can be seen as a disease problem in the elderly, the elderly. There are 19 children affected by COVID. Recent data indicate that children are more likely to have mild symptoms. Among children who were positive, 45% did not show regular symptoms, and 42% did not show mild respiratory symptoms. Although 13% were asymptomatic, children showed no signs of life-threatening symptoms. Children with basic medical conditions such as asthma or diabetes may have higher rates of serious illness; Infants and young children can also be at high risk. In general, children do not know they seem to be at high risk, but they can spread the virus, and other precautions such as the necessary precautions should be taken together, avoiding playing along with the precaution.

There is very limited information on who is affected by COVID 19, including affected children and infants. Clinical properties and effects on 10 infants and 10 infants in 9 mothers and 10 infants in the con group. Rmed SARS-cov-2 infection for February 5, 2020.11. 5 January 20 Chinese hospitals indicate that most COVID patients had fever, cough, and diarrhea in only 1 case. These mothers provided 8 boys and 2 girls, of which 10 (8 singletons and two single beds), 4 were full-term babies' premature system.

Among the10 children, 6 out of 90 had a Pediatric Critical Illness Score (PCIS) with symptoms such as rapid heartbeat, abnormal liver function, vomiting and pneumonia, fever and shortness of breath. Of these 10 children, 9 have recovered and been discharged from the hospital. However, the SARS-cov-2 con network worsened from day 1 to day 1 with negative results for 1 child. From here there were no vertical spreading death and throat stick specimens.

Pregnant women are more susceptible to infections and viral diseases due to changes in the immune system and organs. Although hospital visits when there is a shortage of medications may increase the risk of infection, pregnancy can cause further damage. The third trimester of pregnancy is reported the most significant groups of additional defensive events for
COVID 19 enlargement in pregnant women because of the reported (4, 19). However, the accuracy of the report provided cannot be finally confirmed.

Clinical symptoms in pregnant women are considered consistent with those seen in non-pregnant adults; and show an increase in white matter (41%) and neutrophils (83%) in pregnant women. Features mentioned Glass opaque method on the floor Facility for detection by COVID19 pneumonia. Alveolar damage is associated with lymphopenia in the blood which leads to infiltration of cell fibrous mucus, mucous membrane formation, pneumonia and inflammatory lymphocytes. It is observed in these patients.

Improved coordination and high are also reported to occur clinically in gravidfemales with COVID 19. The evidence of congenital vaginal infection reported in the study of women who gave birth. It is not known whether normal childbirth increases the risk of infection. Ongoing studies are required that do not provide risk assessment and timing guidelines and methods of administering COVID to 19 patients.

Previous studies of the SARS virus show that the virus can cause premature birth, uterine growth retardation, and uterine infant death; therefore, screening of suspected cases during pregnancy and patients and their children requires continuous monitoring. However, there is no clear evidence of vaginal birth of the baby and the risk of cesarean delivery from the mother. Studies show that treatment increases the risk of women with gestational diabetes and normal pregnancy, preeclampsia, thus exposing patient to a higher risk of COVID 19.

The pregnant susceptible to the virus than the average human, especially in the case of chronic diseases, and are more susceptible to respiratory diseases and pneumonia. Therefore, different strategies should be implemented. Various mechanisms are being developed for the protection of pregnant women, and with the increase in knowledge of the pathogenicity of diseases, advanced solutions should be found.

2. Related Work

H. I. Mustafa et al (2020) describes In the application method (detection, prediction and selection, guessing) time series study Covid 19 to find the best Autoregressive Integrated Moving Average (ARIMA) to predict the number of people affected in Iraq. The swarm used collected between 1-March and 31-July. The results show that the corresponding prediction is for model ARIMA (2,1,5). Based on this model, they predict daily thirty-day numbers for those affected by COVID 19. The predicted value indicates the sample capacity, and the original series value is consistent.

P. Cihan (2020) describes Covid 19 integrated into the classification tools to diagnose infectious lung diseases such as the following, in conjunction with medical science up to AI (Artificial Intelligence). Four conditions were evaluated for Covid 19 pneumonia, non-Covid 19 pneumonia, pneumonia and normal lung. The AI system is divided into 2 stages. In the first stage, chest X-ray pneumonia and non-pneumonia are classified as one. Phase 2 should be obtained with stage 1 if fluoroscopy belongs to the lung type, and a Covid 19 positive and Covid 19 negative input are further classified.

S. Tabik et al. (2020) describes as Coronavirus disease (COVID 19) is one of the most contagious diseases of the 21st century, using RT-PCR detection, CT scan and / or chest X-ray (NHA) image detection. CT scanners and RT-PCR scans in many cases CXR images are an effective tool to assist clinicians in making most of the time / expense, therefore, most medical centers are available. Deep learning neural networks have great potential to develop a system for classifying COVID 19 and detect COVID 19 patients, especially at low levels. Unfortunately, the current databases are multifaceted and do not allow the establishment of such systems because they discriminate in more serious cases.

V. Z. Marmarelis et al (2020) described as Covid 19 Infectious Dynamics Analysis in order to guide socio-political decision making, appropriate preventive measures to assist in its reasonable planning in predicting critical outbreak disease, and to According to the established sir system framework the work should include multiple "vulnerable", "infectious" and "recovery / delete" scores per population, and define the dynamic relationship of the first-order differential equation.
X. Wang et al. (2020) described as Accurate and rapid diagnosis of COVID, 19 suspected cases plays an important role in timely isolation and medical treatment. Chest CD Automatic COVID 19 Diagnosis In-depth learning pattern development may be helpful in combating SARS-cov-2 outbreak. Deep learning within the weak structure is to use the COVID 19 classification and the module of the three-dimensional transformer to create the location of the decay. Lung region net segmentation for each patient uses a pre-exercise; then the 3D lung region is classified sent to the 3D deep neurological network to predict the probability of infection with COVID 19; COVID 19 translates into a combination of decay activation area and a classification network of unattended connected components. 499 CD Module Training and Testing 131 Transformer module is used.

X. Ouyang et al (2020) described as the 3D Convolutional Network (CNN) diagnostic decision-making online attention module, with the lungs in the main affected area. It is noteworthy that for the rapid exacerbation of COVID 19 after the onset of partial symptoms there is an asymmetry in the volume distribution in the affected area between COVID 19 and the cap. Therefore, the developed a dual model strategy to eliminate unbalanced learning. Our method is the data of the largest multi-core transformer COVID from 19 8 hospitals. During the training verification phase, the collected 1588 patients with 5 times more cross-examination than 2186 CT scans. In the trial phase, an used another independent large data set that tested 2796 CT scans of 2057 patients.

R. F. Sear et al (2020) described as Dangerous COVID 19 there is a huge amount of misconduct on the internet. The learning machine to measure the content of COVID 19, health guidance, especially vaccine ("anti-VAX") online antagonist. A found that the development of the anti-VAX community around COVID 19 a less focused litigation ("VAX pro") community than its counterpart. However, - in the anti-VAX community it is possible to obtain a broad cross-section of the COVID 19 vaccine, such as personal surveillance or mandatory rapid monitoring guidance from individuals. Therefore, the appearance in the anti-VAX community is better to attract more new support from the pro-VAX community.

Adnan Shereen et al (2020) described as Coronavirus disease 19 (COVID 19) (SARS-cov-2) originated in Wuhan, China and spread all over the world causing severe respiratory disease corona 2 highly transmitted and viral infection. Genetic research reveals that bats may therefore be a potential major reservoir of SARS-CoV-2, a phylogenetic allele and acute respiratory disease (such as SARS) bad virus. Intermediate sources of origin and transmission humans are unknown, but transmission to a rapidly transmitted person has been widely confirmed. Are there any clinically approved antiviral drugs or vaccines to be used against COVID 19? However, some widespread antiviral drugs are being evaluated in clinical trials as a result of COVID-19, clinical recovery.

Hu, S et al (2020) described as Coronavirus disease 2019 (COVID 19) excluded in Wuhan, and has been controlled on the basis of infection. This epidemic of public safety involves great pressure on the national economy. Currently, some countries and regions of the world are still experiencing epidemics, and there is an urgent need to determine the epidemic situation and travel risks in this region. Realize the surrounding situation below a relatively fine level, and then make a reasonable sharing decision to promote productivity and job restructuring. In this study, COVID 19 infection assessment indicators were constructed using multiple source data. Computational evaluation of 736 granular phases using a geographic diagnostic model and a solution branch model.

Zhang, Y et al (2020) described as Many countries have overcome the challenge of the medical resources required for the COVID 19 test, which requires low-cost development, rapid instrumentation to detect and effectively diagnose a large number of viruses. Although a chest x-ray scan is an effective tool candidate if the tests are largely personalized up to this, the images produced by the scan should be accurately examined as soon as possible. COVID 19 Bilateral pulmonary parenchymal ground glass and lung integration are sometimes opaque, with a circular shape and peripheral lung distribution. In this task, our goal is to quickly extract such small areas as chest X-ray images that may contain COVID-19 features being detected.

Ouyang, X. et al (2020) described as COVID 19 has caused a global epidemic and has become a very urgent threat around the world. Great power and resources have been invested in the development of immune, disease analysis and treatment strategies. Although nucleic acid testing has been used primarily as a gold standard to confirm this viral RNA-based disease, research has shown that such a technique has a high false-negative rating, especially in patients in the early stages, so CT imaging confirmation is an important diagnostic method for positive COVID 19. Although the development of Artificial
Intelligence (AI) computer assist systems based on CD COVID 19 is progressing rapidly, most existing methods can only classify the most advanced segmentation methods in the state when high level human intervention is possible.

Cecilia, J. et al (2020) described as Mobile Crowd Sensor (MCS) is a technology in which smartphones perceive devices such as forecasting, the hidden benefits of sharing data about other people within the community. The use of shared information is derived from the online social networks (OSN) embedded in MCS mobile devices which include two different trends (1) mobile sense, and (2) sensor community, original information. In this article, the present chronological development of infectious COVID 19 in Spain, and I summarize MCS research work that addresses the outbreak of COVID 19 in Spanish society. In fact, the risk of COVID 19 infection is being given in today's society; the economy is greatly affected by the control of government and social gaps through action.

ONODA, H. (2020) described as COVID 19 Smart Way to Waste Japan After Active City Management The author's research team explains the results. In particular, the author points out that virtual reality distance education can be an effective solution. The job chain management system helps to promote non-cash in addition to waste detection. Supports multi-purpose handset system self-driving cars and links to smart junk so it can facilitate automatic junk collection.

3. Implementation Of The Proposed Method

The evolving environment (2.0) and solve it in the digital health COVID 19 to discuss changes in the academic Society Critical Care Medicine (SCCM) and the Telemedicine and Advanced Technology Research Center (TATRC) from the peer-reviewed literature evaluating the subject matter experts.

The Fig. 2 shows Public health is growing and it is platform will be activated. Many improvements (formerly COVID-19-2.0) COVID 19 to introduce a clear resolution even with planned controlled trials have been tested, have proven to be suitable for other health problems is a recent model.

3.1 Health Care Center

The health system is overcrowded, it develops as a result of conditions that can be prevented and treated with vaccines and dramatically increase direct mortality from both indirect deaths. While balancing the demand for a direct response to COVID-19, countries are engaged in strategic planning and coordinated action to provide essential medical services to mitigate the risk of systemic disruption. The have to make a difficult decision. This document expands the content of the donor country's readiness and response planning guidelines, and helps to reorganize countries at the national, regional and regional levels and maintain access to high quality standards. Provides guidance on goals and immediate actions to consider in health care for all.

3.2 COVID 19(2.0) Health Care System

The applications of the digital system are of great help to us. This technology NETCCN system used in it helps us have security and get rid of the fears within us easily. This allows the medical aids used and the opinions of the experts to be positive. The World Health Organization (WHO) has published several useful information. All the experts and medical team can easily learn it. And clearly defines the defensive system in these. Performance is rated nationally by this NETCCN digital appraisal.

3.3 Data Weight Calculate

Researchers at Cleveland Hospital have developed one of the world's first risk prediction models for clinical delivery to predict a specific patient's potential for disease, as well as a positive test for COVID 19. Risk prediction sample COVID 19 shows risk age, race, gender, socioeconomic status, vaccine history and association of current drugs. Risk calculation means that healthcare providers use a new tool to integrate patient risk assessment and maintenance outcomes. It is intended for the priority provider's COVID-19 selection, but is not designed for use by asymptomatic individuals who are simply interested in its risks.
3.4 Classification ANN Algorithm

Step1:
Input_dataP1 /
Weight_data Z1 // collection of health care predication //
Accuracy A1 // Accuracy overall health care predication //

Step2:
Z1 = Data upload ("covid.dat")
If Z1 = > P1 true means
A1 = Z1 // collected data's Performance health care predication //
Else if Z1 = > P2 False means // Data matching data check //
A1 = Z2 // matching data collected to health care predication

Step3:
Predication P = A1 // performance Classification of health care predication

Step4:
End.

4. Result And Discussion

The front end tool PYTHON is simulated using a program created in python language. At the end of the simulation output data processing can use the trace file is calculated to CSV file.

Table 1 proposed simulation parameters

| Parameter                  | Value                                      |
|----------------------------|--------------------------------------------|
| Programming Language       | python                                     |
| Version                    | 3.9                                        |
| Input Data Set format      | .CSV file                                  |
| No of dataset              | 15000 data set for Live                    |
| Tool                       | anaconda tools                             |
| Real Time Application      | Health Care Data Center                    |

The qualify for recognition and have faced obstacles. Educational background is restricted by default. Note that the position of the table 1 qualified medical procedure table. Accounting guidelines and regulations for telemedicine and medical vocabulary in the form of the model is inadequate management controls.
Data Analysis and Interpretation

As can be seen from the above table of data analysis that in the almost in all the cases the calculated value is less than the table value, this shows that most of the respondents are agreed to the point in question.

Table.2 Chi-Square test (H1)

| Chi-Square test (H1)            |
|--------------------------------|
| Satisfaction from Medication   |
| On the basis of Age            |
| Felt state of recovery         | 0.21 |
| Doses are comfortable          | 0.115|
| Price of Medicines is affordable| 0.109|
| Some specific Medication       | 0.075|
| On the Basis of Gender         |
| Felt state of recovery         | 0.32 |
| Doses are comfortable          | 0.23 |
| Price of Medicines is affordable| 0.105|
| Some specific Medication       | 0.569|
| Calculated Value               | 1.954|
| Table Value                    | 1.505|

This is a thumb rule in case of Chi-square test that if the variation the table and calculated value is more that it is considered that the respondents are not in agreeable state in table.2.

The hence in case of satisfaction from medication, it is found that most of showthe Fig. 2 respondents are given the common medication and there is not much difference in the same, on the other hand the government authorities and even doctors are waiting for vaccine to arrive, in the time being Zinc, B-Complex and some other Vitamins like Vit. D and C are given to patients for faster recovery (shown in figure.2).

Table.3 State of Quarantine Center

| State of Quarantine Center |
|---------------------------|
| On the basis of Age       |
| Crowd                     | 0.106 |
| Cleanliness               | 0.119 |
| Social Distancing         | 0.108 |
| Other facilities          | 0.325 |
| On the Basis of Gender    |
| Crowd                     | 0.687 |
| Cleanliness               | 0.451 |
| Social Distancing         | 0.349 |
| Other facilities          | 0.67  |
| Calculated Value          | 1.363 |
| Table Value               | 1.977 |

As a matter of fact the patients who have recovered from the disease stated that these medications have helped them to recover at a faster rate. As far as quarantine center are concerned, in almost all the sampled cities the state of State of Quarantine Centers satisfactory. It is the observation of researcher that government authorities are taking all the care to maintain cleanliness, sanitary and hygiene at the respective centers and even the respondents have stated the same above table.3.

Then on the other hand in case of using meditation, most of the respondents stated that at the quarantine center the coordinators used to motivate the patients for religious chanting and singing ‘Bhajans’ and other religious songs. Most of the respondents stated that they have gained mental strength in the process (shown in figure.3)
Table 4 Use of Meditation

| Use of Meditation | On the basis of Age | On the Basis of Gender |
|-------------------|---------------------|------------------------|
|                   | Impact on recovery  | Mental Strength        | Faster Recovery | Motivation | Impact on recovery | Mental Strength | Faster Recovery | Motivation |
| Calculated Value  | 0.681               | 0.451                  | 0.249           | 0.353      | 0.249              | 0.125           | 0.239          | 0.106      |
| Table Value       | 1.901               | 2.671                  | 2.596           | 2.919      | 3.199              | 2.919           | 2.118          | 2.611      |

Table 4 Use of Meditation, Ratio 3.3% of the respondents stated that they are meditating at least once in a day and the researcher observed that they are unknowingly practicing ‘Fast Recovery’ i.e. three stage meditation. Apparently, only a few stated that this has helped them to recover from the infection.

Out of all the ratio 3.3% of the respondents show the Fig. 4 using motivation only ratio 2.9% were satisfied with their present condition and physical health. As a matter of fact this is a good sign but then again it is felt that if some professionals are engaged in the process then the sign of faster recovery can be seen.

Table 5 Use Satisfaction from Recovery from Meditation, Ratio 2.518% about the respondents talked about up to expectation they are meditating at least as soon as between a epoch yet the researcher rendered to that amount they are unknowingly working towards ‘Felt state of recovery’. Physical Strength has increased in below figure 6. Apparently, solely a little spoke of to that amount this has helped to them in imitation of excerpt from the infection.

Table 5 Satisfaction from Recovery from Meditation

| Satisfaction From Recovery from Meditation | On the basis of Age | On the Basis of Gender |
|-------------------------------------------|---------------------|------------------------|
|                                           | Felt state of recovery | Taking Regular Sessions | Satisfied with Trainer | Physical Strength has increased | Felt state of recovery | Taking Regular Sessions | Satisfied with Trainer | Physical Strength has increased |
| Calculated Value                          | 0.662               | 0.107                  | 0.129                 | 0.559                  | 0.128              | 0.149                  | 0.681                 | 0.345                  |
| Table Value                               | 1.919               | 2.397                  | 3.698                 | 2.669                  | 2.919              | 4.319                  | 1.912                 | 2.518                  |

Therefore, into the Satisfaction from Recovery from Meditation, while near regarding the respondents are ready because the arrival vaccine administration officers or doctors, a huge distinction is to that amount customary capsules are given. At the equal period that turned oversea that there execute be incomplete Physical Strength has increase stand addicted after the affected person because of quicker quotation (shown in figure 5).

5. Conclusion
The recent national and international events have already impacted the medical infrastructure in large-scale emergency care, and the challenge facing medical needs is to meet these needs. The proposed analysis of artificial intelligence (AI) based Classification ANN Algorithm clearly defines the support for all digital predictions. An approach to address these challenges exists in the existing telemedicine and other digital medical technologies, skills and expertise to expand the local, provincial and central health. Global disaster or emergency situation needs to provide a response in the operation of the digital NETCCN health framework, flexible, extensible, flexible, and most particularly, is in development. It is necessary to ensure the existence. Skills derived from capability will now enable NETCCN to retain, deliver, deploy and deploy quickly to a level of advanced care to make our country more secure during crisis.

6. Declarations

Conflict of interest:
There is no conflict of interest.

Funding:
There is no funding information.

Availability of data and material:
There is no availability of data and material.

Code availability:
There is no code availability.

Author’s contribution:
There is no author’s contribution.

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Figures
Figure 1

Architecture of the proposed method for digital health care information for COVID-19 (2.0)

Figure 2

Satisfaction from Medication
Figure 3
State of Quarantine Center
Use of Meditation

| Use of Meditation | Motivation | Faster Recovery | Mental Strength | Impact on recovery |
|-------------------|------------|----------------|-----------------|-------------------|
| On the basis of Gender | | | | |
| Age | | | | |

Figure 4

Satisfaction From Recovery from Meditation

| Ratio(%) | Felt state of recovery | Taking Regular Sessions | Satisfied with Trainer | Physical Strength has increased | Felt state of recovery | Taking Regular Sessions | Satisfied with Trainer | Physical Strength has increased |
|----------|------------------------|-------------------------|-----------------------|-------------------------------|------------------------|------------------------|-----------------------|-------------------------------|
| 3        | Calculated Value       | Table Value             |                       |                               |                        |                        |                       |                               |

Figure 5
Satisfaction from Recovery from Meditation