iJRASET
International Journal For Research in
Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 8 **Issue:** III **Month of publication:** March 2020

DOI:

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 8 Issue III Mar 2020- Available at www.ijraset.com

A Survey on Epidemic Growth of Corona Virus-Covid-19 in Global world: Issues, Concern and Possible Remedial Parameters

Rohit Madhukar Nikam[1], Kailash Haribhau Kapadnis[2], Ratan Yadav Borse[3]
[1]*Assistant Professor Department of Chemistry, M. J. M. A.C.S College, Karanjali, Tal- Peth, Dist-Nashik-422 208,*
[2]*Professor Department of Chemistry, L. V. H. A.C.S College, Panchavati, Dist-Nashik-422 003,*
[3]*Principal, Department of Physics, M. J. M. A.C.S College, Karanjali, Tal- Peth, Dist-Nashik-422 208.*

Abstract: This survey paper deals with systematic study of covid-19 disease a severe acute respiratory syndrome for human heath parameters. It studies the origin, spread and following nature of corona virus in atmosphere or environment, habitual growth and possible remedial analysis with respect to social, economic, medical and environmental corners. It gives possible information of covid-19 disease and virus through scientific approach. It put forward possible measurement how to stop covid-19 disease through good habits of health and hygiene of human.
Keywords: Corona, covid-19, virus, disease, health and hygiene etc.

I. INTRODUCTION

In the era of development of human being since last thousands of years, he has been facing a lot of challenges in nature. But still he has been making his growth in different ways with respect to his development associated with cultural, social, employment policies reformations and constructions of carriers. He has been lifted benefits for his owns. But he has removed and crossed many natural barriers while doing for his development. The natural calamity aroused in Wuhan china and spreaded multipically and exponentially of covid-19 diseases in person to person through all over world-wide is example of human health worst condition [1]. The question of public health has been also coming front in front of many developed, developing and undeveloped countries. Till date there are total 185 countries that were affected from corona disease.

II. LITERATURE SURVEY

A virus is made up of RNA or DNA genetic code material covered with protein moiety. It is too much small that we can't see with necked eyes even in microscope. There are total 100 million corona viruses can accommodate on the tip of one pin. In the development of human history many dangerous diseases and natural calamities have been aroused like earthquake, epidemic diseases like plague, SARS, bird flu, elephantiasis (hathi rog) etc., floods, wars but the most noteworthy among all is corona disease raised in wuhan on December 2019[2]. It is so much dangerous to human life that no preventive medicine has recorded and discovered by scientist and researchers from the clinical field. So far to protect the life of affected persons clinical trials have been performing them like chloroquine, anti-aids preventive dosses, anti-malarial drugs in different countries. But no medicine has effective till date and such type of a situation now raised to take preventive measurements. In 2020, Cao et al. reported that hospitalized adult patients with severe Covid-19, no benefit was observed with lopinavir-ritonavir beyond standard care with background of no therapeutics yet have been effective for the treatment of severe illness caused by SARS-CoV-2[3].

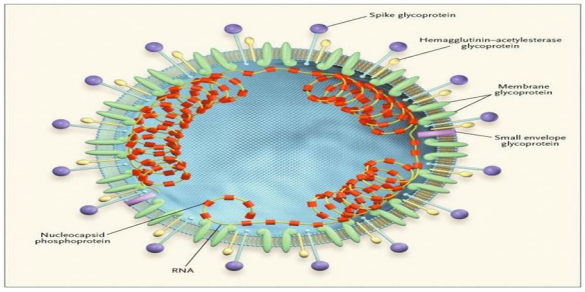


Fig 1. Structure of Coronavirus Virion (Adopted from NEJM sources- perspective SARS Associated coronavirus 2003)[4]

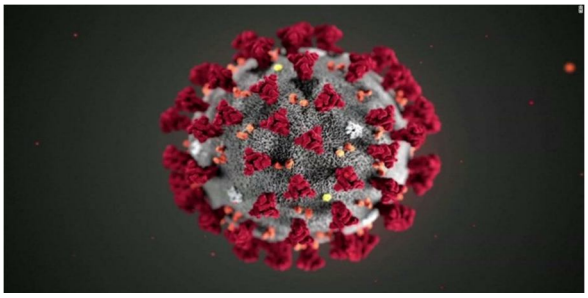
©IJRASET: All Rights are Reserved

III. EXPERIMENTAL

This survey article imparts the contribution of social health hazards evoked due to Covid-19 and suggest how to overcome by taking safety precautions from person to public health. A review based technique is useful to implement a good habits inculcate in human health parameters. This article provides a theoretical impact by sharing ideas, concept collected in different research papers, newspapers, current TV shows on corona disease so as to stop the global assault of SARS-CoV-2. It is better to understand the possible remedial parameters, chain growth mechanism and possible threat due to Covid-19 by this review and survey article.

IV. RESULTS AND DISCUSSIONS

Our earth is also full of saturated with different types of viruses, it is better to understand the hijack concept of corona virus. It hijacks the entire cell by destroying the independent and free nature of attacked cell. SARS CoV-2 is the name of virus and Covid-19 is the type of disease caused by virus.



(Adopted from Google sources)

There are seven types of corona virus out of which four viruses causes mild cough and cold. SARS, MERS are the class of corona viruses which was already spread in all over world-wide and dangerous to human health. The SARS-CoV-2 is most epidemic and dangerous virus most causing corona disease. It is regarded as NOVEL Corona virus due to human never seen before. The immunity system of human being has been developing since last 20 million years, but SARS-CoV-2 viruses destroy the power and capability of human immunity system [5]. It is evident that the life time of corona virus ranges from 3 hours to 72 hours. It depends on the contact layer with which corona virus come in contact with hard, porous, non-porous, metallic, soft structure material [6]. In 2007 Vincent C. C. et al., suggested that the presence of large reservoir of SARS-CoV-like viruses in horseshoe bats, together with the culture of eating exotic mammals in southern China is a time-bomb. These viruses are well known to undergo genetic recombination (375) which may lead to genotypes and outbreaks [7].

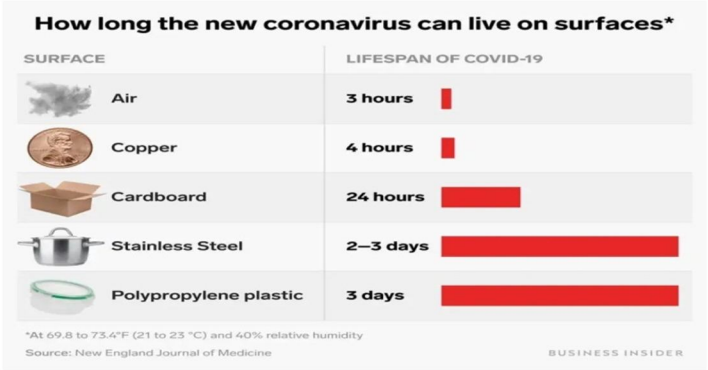


Fig 2. life span Covid-19 on different material surfaces
(Adopted from [6] Business insider)

A. *Application And Directives Of Good Habits For Remedial Of Corona Disease*

1) Isolation, quarantine and lock down when situation become worst are the best prevention indicators or etiquettes to eradicate the corona disease.

©IJRASET: All Rights are Reserved

2) Some methods adopted like use the non-dominant that is your left hand instead of right hand if you are right handed vice-versa for door knobs, bath-rooms etc. because it is very difficult for you to touch your face with that hand. South- Korean peoples find this effective technique to encounter the problems raised due to corona disease.
3) Do not touch your hands to your face organs including nose, eyes, mouth.
4) Use of handkerchief when sneezing.
5) Wash hands frequently.
6) Use the rules and manners on respiratory system.
7) If something filling badly to hygiene and health, contact to family doctor or hygiene center.
8) It is preventive to keep one meter distance if someone is affected from cough, cold or sick person is around to you.
9) Wash hand and legs when coming from outside.
10) To avoid people from gatherings.
11) Not to go colleges and school, because corona disease steps expontially in multiplication.
12) Do not felicitate or shake hand and even not to hug. Instead of felicitation use Indian method of Namaste.
13) Special medicine on corona disease is to stay at own home for at least 14 days and produce and spread the concept of self-quarantine.
14) Higher source of different proteins, fruits rich in vitamin-C in diet not only increases but also strengthens, boost the human immunity system.

B. *Four Stages of SARS-CoV-2 and Exponential Nature*

There are four stages of SARS-CoV-2 of multiplication

1) Stage I- Cases of corona disease come from outside.
2) Stage II-Local spreading of corona disease is encountered.
3) Stage III-Area of community of people gets infected.
4) Stage IV-Total epidemic growth with uncontrollable sequence takes place.

It would be clear to mention that a starting point of corona disease is upper part of respiratory system consisting throat. When person come in contact with corona virus, this virus remain 4 hours in the throat area. The incubation time of this disease is 14 days means the affected person comes to know after 14 days. In between this period he comes across with different systems like cough, cold, fever of small to high intensity. If such a person is not home or hospital quarantined then he himself acts as potent disease donor and spreader through congestion epidemically. He can spread disease to next 2.6 people. These people spread in much multiplication. In adverse condition linear propagation breaks and expontially chain aroused this is chain reaction like in nuclear reactor, then cross-multiplication takes place with graph of function equation as given below.

$$Y=B^{x} \ldots\ldots\ldots\ldots [1]$$

Where Y is value on vertical axis,
B is value in horizontal axis,
X is power/exponent factor.

Fig. 3 shows How Covid-19 Spread [8]
(Adopted from Ministry of health and family welfare Government of India sources)

©IJRASET: All Rights are Reserved

According to WHO sources the death rate of novel corona disease is 3% while some researchers says that it is 1-2%, but chances of increase in death rate increases if infected persons possess age group after 60 years old i.e., old members of society in such a situation death rate increases in between 10-15%. As such a patient must be admitted in ICU facility [9]. It is noteworthy that Covid-19 can be cured after a long proper treatment of minimum 15 days at hospitals but recovery depends on immunity power of patient

C. Possible Threat

It must be known to every citizen what will be global hazards of this calamity; definitely it will bring to much poverty, unemployment, deficiencies in daily and essential needs thereby it will hit the economical building of every country. Covid-19 brings economical hazard. Covid-19 will affect approximately one year to every affected country. Covid-19 will affect stock exchange market shifting its values lower till its eradication.

V. CONCLUSION

As is aphorism said Prevention is better than care. Prevention is always preferred over care. The time bomb like situation due to corona disease is now spreading everywhere all around the globe. Question of handling the situation and providing the hospital facility to each affected person due to corona disease is raised not only in front developed countries like China, America, some European countries like Italy, Germany, but also in front of developing countries like India, Iran, Iraq, other African countries. The challenge to every affected country from Covid-19 is how to give the stability to national economy.

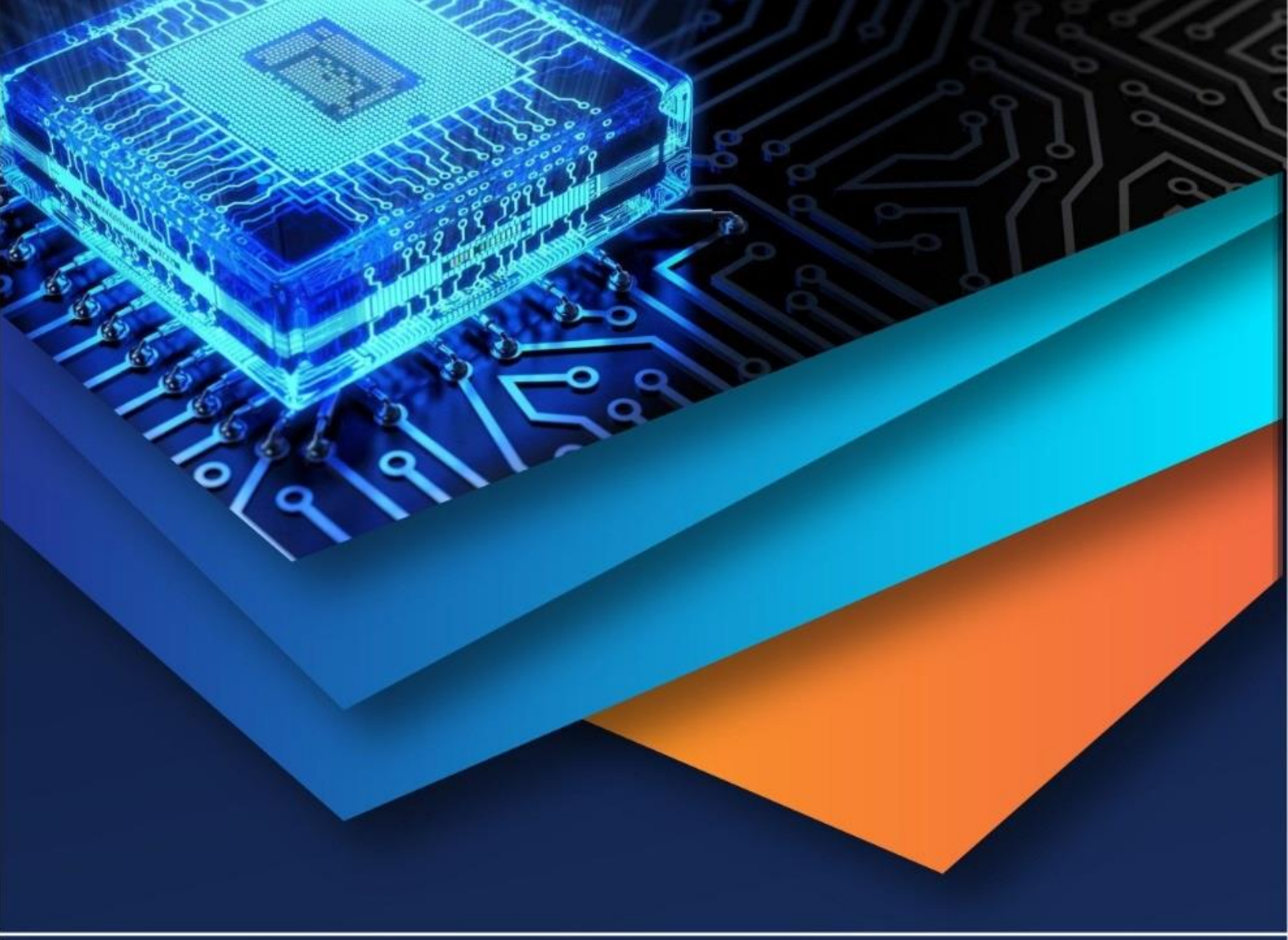
It is fact that no one can stop the epidemic growth of Corona disease except the human life, his daily habits of cleanliness, his command on himself through social and environmental values for development. The patience, isolation, quarantine are effective ways that can stop the growth crisis and only human can stop the potent growth of Covid-19. Really this will be acts as remedial parameter for human against global issue of corona disease. It is disease caused by human; condition will be controlled by human and cured by human being only through good habits of cleanliness because of SARS-CoV-2 is dangerous to human health.

No Medical tablet, injection, antibiotic group is too much effective against novel corona disease and proper vaccine not to yet discovered. If vaccine will be discover; it takes too much time nearly one year to become its use in common in common society, so we have only choice of wait and watch about vaccine, unless and until prevention is better choice to fight against corona disease and eradicate Covid-19.

REFERENCES

[1] En.wikipedia.org coronavirus 19.
[2] World health organization's sources www.the guardian newspaper
[3] Bin Cao, Yeming Wang, Danning Wen, Wen liu and all, A trial of lopinavir-ritonavir in adults hospitalized with severe Covid-19, The New England Journal of Medicine, Doi 10.1056/NEJMoa2001282, March 18, 2020
[4] Kathryn V. Holmes, Perspective SARS-Associated Coronavirus New England Journal of Medicine 348, 2003 1948-1951 Doi 10.1056/NEJMp030078
[5] Interview of Peter piot: Coronavirus is going to be 'everywhere', CNN international news.
[6] Aylin Woodward and Shayannegal, , how long the corona virus can survive on surfaces article in Business insider website (www.businessinsider.com) in America March 19 2020.
[7] Vincent C. C. Cheng, Susanna K. P. Lau, Patrick C. Y. Woo and Kwok Yu. Severe Acute Respiratory Syndrome Coronavirus as an Emerging and Remerging Infection, Clinical Microbiology Reviews, 2007, pp 660-694.
[8] Sources from Ministry of health and family welfare Government of India
[9] Interview of Peter piot: Coronavirus is going to be 'everywhere', CNN international news.

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)