

COVID-19: HEALTH COMMUNICATION

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The ultimate value of life depends upon awareness and the power of contemplation rather than upon mere survival.

-Aristotle

Abstract:

The research paper reviews the nature of COVID-19 pandemic and health communication efforts made by the Government of India for prevention of spread of COVID-19. It summarizes and also identifies sources of authentic information i. e. scientific organizations relevant for getting information during pandemic. It is noteworthy that unscientific information may lead to superstitions and unhealthy behaviours. The research paper is a review paper by making use of secondary literature collected from various research papers, annual reports, magazines, journals and websites. The paper also makes use of data on COVID-19 confirmed cases, cured cases and deaths. The data has been extracted from PRS Legislative Research Website. The efforts have been presented at the national as well as international level. Furthermore, the paper further reveals that existing health communication is not sufficient. Consequently, there is need of more communication efforts in general and scientific communication in particular in order to prevent spread of COVID-19.

Key words: *Awareness, COVID-19, India, Information, Health Communication & Pandemic.*

Introduction: COVID-19 is a global challenge which the whole world is facing now days. Any nation whether developed or developing is not untouched by this problem. Most of the nations are not only losing their socio-economic development but also lives of their fellow citizens. It is a matter of fact that India is getting effected from this pandemic on a fast pace and it became second largest country in the world after United States of America.

Coronavirus Disease (COVID-19) is an infectious disease caused by the most recently discovered coronavirus. The name is corona because this is the newly discovery and it was not known earlier. Coronaviruses are a large family of viruses which may cause illness in animals or humans. In humans, coronaviruses cause respiratory infections such as the common cold as well as Severe Acute Respiratory Syndrome (SARS). The recently discovered virus is termed as Coronavirus and named as COVID-2019 by WHO as it was discovered in Wuhan, Hubei, China. Due to new virus, it is known as novel. More interesting fact is that the source of this virus could not be identified till now. COVID-19 has been declared as a pandemic by WHO due to the alarming levels of spread and severity. Till date, there is no specific medicine to treat or prevent COVID-19. On March 11, 2020, the World

Health Organization declared the COVID-19 to be a global pandemic. In India, the first case was found on January 30, 2020 in Thissur, Kerala. More interesting fact is that the source of this virus could not be identified till now. It is shocking that Chinese Ophthalmologist Li Wenliang who had identified this corona virus on December 30, 2019, himself died from this disease after infection from this virus had died on 6.2.2020.

The severity of corona virus is very intensive which can be understood by the fact that the virus has spread in 213 countries and Territories around the world and there are 3621245 confirmed cases of the corona virus and a total of 64469 people have died due to this virus as on 31 August 2020.

Regarding the symptoms of COVID-19, there are different symptoms in different people. Moreover, it affects different people in different ways. Several people are infected and develop mild to modern illness and also recover even without hospitalization. However, the most common symptoms are: fever, dry cough and tiredness. Less common symptoms are: aches and pains, sore throat, diarrhea, conjunctivitis, headache, loss of taste and smell and a rash on skin or discoloration of fingers or toes. Serious symptoms are: difficulty in breathing or shortness of breath, chest pain or pressure and loss of speech or movement. People affected by COVID-19 with mild symptoms but otherwise are healthy can manage their treatment at home. On average, it takes 5-6 days from when someone is infected with the virus for symptoms to show, however it can take up to 14 days. The corona virus after entering the body starts infecting healthy cells. More important fact is that the numbers of cells increase in multiple numbers. This virus leaves oily protein on healthy cells and later on it breaks. Thus the healthy cells of the body start dying which effects lungs the most. This virus may be available on air or any surface. This virus entering from nose or mouth reaches in the mouth and places there. Thus the immune system of the person weakens from 2 to 14 days and the characteristics of disease also shown.

The older persons and also persons with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease and also cancer are more likely to develop serious illnesses due to COVID-19. The primary source of spread of this virus is droplets of saliva or discharge from the nose when an infected person sneezes. Therefore, it is safe to adopt respiratory etiquette by coughing into a flexed elbow. Protection from infection may be taken by washing hands or using an alcohol based rub frequently and not touching face.

Objectives:

1. To review health communication efforts for prevention of spread of COVID-19.
2. To identify sources of authentic information i.e. scientific organizations relevant for getting information during pandemic.

Prevention from COVID-19:

There is no specific treatment or vaccine is available for COVID-19. However, to prevent infection and also to slow transmission of COVID-19, the following practices may be helpful: wash your hands regularly with soap and water for 20 seconds multiple times or clean them with alcohol-based hand rub, maintain at least 1 meter distance between you and people coughing or sneezing, avoid touching your face, cover your mouth and nose when coughing or sneezing, stay home in case you feel unwell, refrain from smoking and other activities that weaken the lungs, practice physical distancing by avoiding unnecessary travel and staying away from large groups of people.

Importance of Health Communication:

In 1948, World Health Organization defined health as, "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". In 1986, WHO made further clarifications, "A resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities." This means that health is a resource to support an individual's function in wider society, rather than an end in itself. A healthful lifestyle provides the means to lead a full life with meaning and purpose. In 2009, researchers publishing in *The Lancet* defined health as the ability of a body to adapt to new threats and infirmities.

Health is an important subject and in the times of COVID-19, this importance has increased. Due to its increased importance, health communication to the public has a significant role to play. Health communication is the study and practice of communicating promotional health information such as in public health campaigns, health education and between doctor and patient. Health communication is defined as, "the study and use of communication strategies to inform and influence individual and community decisions that enhance health." According to the U.S. Department of Health & Human Services (2020), health communication is defined as "the study and use of communication strategies to inform and influence decisions and actions to improve health". Thus, it is an imperative need to implement health communication properly for getting better solutions to health related problems by the public.

Recognizing the importance of communication, 'communication' has been identified as one of the complementary approaches to be used in health promotion by the World Health Organization in 1984. Since then, the health promotion and health communication field have developed significantly (Rootman, 1996).

Keeping the data on increase of COVID cases, deaths and global spread of the disease, the Director General of the World Health Organization (WHO) announced this viral disease a pandemic on 11 March 2020. Moreover, this COVID-19 has caused a complementary

infodemic due to the situation of crisis. Infodemic also contains invalid information. However, reliable information is significant for designing and also implementing preventive measures against COVID-19. In the time of social media, invalid information spreads very fastly which needs to be regulated (Mheidly & Fares, 2020).

Despite best efforts by all the stakeholders, a sizeable amount of the population is not taking the pandemic seriously and also underestimating the infection rate. Therefore, there is need of good health communication efforts in order to lessen the spread of COVID-19.

Efforts made in the field of health communication:

1. By World Health Organization:

WHO recognizes that effective, integrated and coordinated communication is integral to carrying out WHO's goal to build a better, healthier future for people all over the world. The purpose of this Framework is to describe a strategic approach for effectively communicating WHO information, advice and guidance across a broad range of health issues: from chronic health issues to emerging and novel risks. Looking at the WHO's communications goal, although techniques, audiences and channels for WHO's communication products and activities differ, they all have the same goal: "to provide information, advice and guidance to decision-makers (key audiences) to prompt action that will protect the health of individuals, families, communities and nations." WHO focuses on communicating to and with key audiences as health decision-makers. They are the agents who use WHO communications products to make a range of health decisions and include individuals, health care providers, policy makers, communities, international organizations and stakeholders and WHO staff. Furthermore, WHO has formulated six principles for effective communication and they are accessible, actionable, credible and trusted, relevant, timely and understandable. For health threats of all kinds, it is important for WHO to provide the public and media with quick and easy access to up-to-date information by way of statements and notes for the media, situation-specific webpages, transcripts of press briefings, online questions and answers, fact files and fact sheets and maps of affected regions. WHO also organizes health campaigns in the form of global public health days. WHO campaigns provide opportunity to raise awareness and understanding about critical health issues, attention on a health issue of high importance from policy makers to families and communities. Moreover, WHO focuses particular attention on seven days and one week during the year that WHO member states have mandated as official global health observances. They are: World TB Day, 24 March; World Health Day, 7 April; World Immunization Week, last week of April, World Malaria Day, 25 April; World No Tobacco Day, 31 May; World Blood Donor Day, 14 June; World Hepatitis Day, 28 July and World AIDS Day, 1 December (WHO, 2017).

2. By Government of India:

i. Recognition of authentic organizations: The information provided by any organization is not worth useful. Therefore, it is essential to identify scientific institutions communicating authentic information on COVID-19. These organizations are: WHO, ICMR, VigyanPrasar, DST, NRDC and NISCAIR. Moreover, the prospective groups who are more likely to be affected by COVID-19 are women, children, older people and sick persons. There is need to focus on these groups for health communication purpose.

ii. Department of Science & Technology (DST): Keeping the seriousness of COVID-19, Government of India through DST launch programme on health and risk communication 'Year of awareness on Science & Health (YASH)' with focus on COVID-19 on 2.5.2020. National Council for Science & Technology Communication (NCSTC) is the nodal agency to implement it. This is a complete science and health communication effort for the promotion of grass root level appreciation. Furthermore, response on health would also help saving and shaping the lives of people and also build confidence, inculcate scientific temper and promote health consciousness among them. The objective of the programme is to minimize the risks at all levels with the help of public communication and outreach activities promoting minimum science including personal sanitation and hygiene, physical distancing, maintaining desired collective behaviours and so on.

Due to the challenges posed by COVID-19, there is increased role of scientific awareness and health preparedness for combatting the pandemic. For this, there is need of translation and usage of authentic scientific information not only to convey the risks involved but also to facilitate the communities to overcome the situation. The YASH comprises development of science, health and risk communication software, publications, audio-visual, digital platforms, folk performances, trained communicators especially in regional languages to cater the need of various cross sections of the society in the country.

"In the absence of vaccines and cure for COVID-19, conveying the authentic best practices on cutting down on the transmission of virus and its management are of paramount significance. In order for a widespread grass-roots impact, our communication strategies have to be multidimensional, engaging, informative and delivered with speed and scale," said Professor Ashutosh Sharma, Secretary, DST on the occasion of launch of YASH. YASH envisioned special outcomes like improved risk understanding amongst target groups including working with local sensitivities, belief systems, traditions and indigenous knowledge in order to bring attitudinal change among the public. It will also clarify misperceptions, misbeliefs as well as provide authentic knowledge duly verified by scientists and researchers. Looking at the past activities, India got success in the eradication of polio, bringing down HIV infections, controlling TB, anti-tobacco and menstrual health....etc.

iii. Measures taken by Ministry of Health & Family Welfare: The Ministry of Health & Family Welfare released several advisories and notifications addressing to citizens, hospitals, state governments/departments/ministries and employees. COVID-19 testing laboratories opened and social distancing measures issued. The Indian Council of Medical Research provided free of cost diagnosis to all individual with COVID-19 symptoms. These included persons with close contacts of those who have tested positive for COVID-19 and then developed respiratory symptoms within 14 days of contacting infected person and persons with a travel history to COVID-19 affected countries who showed symptoms within 14 days of their return. Moreover, social distancing norms were notified to be followed by state governments. Major measures included closure of all educational establishments, gyms, museums, cultural and social centres, swimming pools and theatres, postponing of exams, employers to allow employees to work from home.

iv. AarogyaSetu App: This app connects the people of India with health services provided by Department of health to COVID-10 patients. This is a digital application for contact tracing, syndrome mapping and self-assessment services. It is developed by National Informatics Services under Ministry of Electronics & Information Technology (MeitY). However, this app is an updated version of an earlier app called Corona Kavach. This app is available in 12 languages. There are four sections in the app:

- a. Use Status intimating risk of getting COVID-19 for the user
- b. Self-Assess identifying COVID-19 symptoms and their risk profile
- c. COVID-19 updating local and national COVID-19 cases
- d. E-pass integrating e-pass facilities

v. Measures to curb Misinformation on COVID-19 on Social Media Platforms: The role of media is very significant especially in pandemic times. It is equally important that right information should be shared in such times. Keeping importance of correct information during pandemic, the Ministry of Electronics and Information Technology (MeitY) issued an advisory on March 20, 2020 to all social media platforms to curb misinformation on COVID-19 on their platforms. The advisory urged the platforms to initiate awareness campaign for the users not to upload/circulate any false information that may create panic among the public, take immediate action to disable/remove such content on priority basis and also promote the dissemination of authentic information as far as possible.

During pandemic, it is essential to prevent rumors as rumors play very bad role and also make significant losses. There was one rumor that poultry products have vector for COVID-19. Therefore, several poultry farmers made their mature broilers dead because there was no demand. Moreover, the prices of broilers also decreased significantly. Resultantly, on one

hand there was a big loss to the poultry farmers and on the other hand the broilers were made dead which is also against the principle of right of natural life.

3. Efforts made by Google: Google has made doodle on number of times with the message of awareness on prevention of spread of COVID-19 and also thanking all corona virus helpers. These types of messages are very useful to spread awareness due to being online messages.

4. Efforts made by print and electronic media: Several efforts have been made by print and electronic media in various forms. Numerous news items, articles and editorials are published by the print media to sensitize the public. Data on COVID-19 on daily basis is also provided by the print media. Latest government initiatives are also shared by the print media. Moreover, various news items, discussions, efforts made by NGOs and individual persons are also shown in order to communicate the message pertaining to COVID-19. Latest government initiatives are also shared by the electronic media.

Overview of Literature:

Composite and unique challenges have been created by COVID-19 thereby compelling coordination and communication among manifold actors comprising not only politicians, local authorities, the media, public health experts but also scientists. Therefore, the task of scientists has become challenging by way of changing expertise into effective communication on global concerns. Thus, anxieties may be cut through this method (Sandrini& Katz, 2020).

There are several countries which are unable to address public health emergencies despite the fact that earlier pandemics and also reports on pandemic preparedness. For such effective pandemic response, there is one vital factor i.e. communication between governments, health professionals, scientists, the media and the public. During such periods of uncertainties, strategies like new curricula in systems medicine and effective communication are required in order to affect preventive behavior and also to train health-care professionals, researchers, teachers, media professionals and decision makers with active involvement in communicating with the general public (Wang, Cleary, Little & Auffray, 2020).

Lack of correct health information and misrepresentation of information create risks to the public during the pandemic of COVID-19. These risks not only create depression, stress, fear, uncertainty and also deaths but also effect decision making process. In order to address this issue, there is need of developing positive outlooks like reason, truth and evidence among the public (Sholts, 2020).

There are several communication flaws and failures in the dissemination of the relevant information to the public. The government reports, journalism, talk shows, public relations

news releases from industry and academic institutions have often failed to communicate the results of studies well and these failures have important consequences as well. Furthermore, dissemination of hurried, incomplete and biased misinformation causes too much harm to the public (Saitz, 2020).

There are so many social media platforms but twitter is continued to serve as a valuable medium to spread all the information pertaining to COVID-19. Through twitter, warnings, future directions, infectious disease models and research conducted in the field of COVID-19 may be shared in an effective manner. All this information is of paramount importance and is useful for decision making process (Pollett& Rivers, 2020).

The existing crisis situation of COVID-19 is exceptional in nature. Such type of widespread pandemic has not occurred before so there is need of widespread and intensive actions from the political and healthcare communities. Moreover, there is need of interdisciplinary response from the research community. In addition, experts from the fields of communication, education and other social sciences need to take responsibility for health behavior change in order to respond in the critical situation of COVID-19. Therefore, effective health communication is a vigorous factor in fighting the COVID-19 pandemic (Finset, A. & et al. (2020).

There is imperative need for accurate information not only to fight against COVID-19 but also to fight misinformation caused due to this pandemic stress and fear. Therefore, it is the prime duty of the scientific community to provide clear and accurate information about COVID-19. Resultantly, this will provide a chance for public debate and also help in decision making process by the public (Scheufele& et al., 2020).

In the times of COVID-19, one more problem of infodemic has arisen with COVID-19. It is a matter of fact that infodemic includes both accurate and inaccurate content. There is no harm to the public from accurate information but inaccurate information has the potential to severely harm the public. For example, hundreds of Iranian citizens died in March 2020 after ingesting alcohol in a bid to treat COVID-19 following the misinformation being circulated on social media. Thus, there is the responsibility of health communicators to circulate accurate information to the public. Rumours may also be prevented for further spread. It is worth noting that WHO has launched an initiative called 'Myth busters', in order to address misconceptions and fake information. Therefore, it is the time to fight with false information also along with the COVID-19 (Ratzen& et al., 2020).

The global COVID-19 has provided a challenge for scientists, researchers and policy makers for communication context. The responsibility of providing solution to this pandemic lies on science but there is no one science or academic discipline to dominate policy action with respect to COVID-19. Science is a social activity. Therefore, researchers from various

disparate disciplines have important understandings to contribute. Expertise from different fields is required to mitigate and manage this pandemic. Thus, researchers from all the disciplines of sciences, social sciences and humanities need to contribute for policy action and health communication purpose (McKinnon, 2020).

After the formation of World Health Organization (WHO) in 1948, numerous films were made in order to present the aspirations of this new enterprise to the audiences around the globe. Among these films, 'The Eternal Fight' (United Nations (UN)/WHO, 1948), offered oratorical and verbal narrative of mankind's failed efforts to overcome disease through the ages. Furthermore, while social networks can furnish significant sources to peer to peer healthcare professionals, the information disseminated through these platforms can 'cultivate fear and hasten the spread of misinformation in the face of a public health threat'. In addition, WHO health education films such as 'The Eternal Fight (1948)' Mission Zika communicates instructions from a centralized authority conveying the expectations from viewers will obtain, integrate and accomplish the assigned behaviours (Ostherr, 2020).

To address the challenges of the COVID-19, there is need of unison efforts by the stakeholders comprising governments, communities and civil society organizations and most importantly citizens. Moreover, awareness and information dissemination are of vital importance in order to combat the pandemic. Furthermore, there is need to streamline the access to welfare schemes for disabled and elderly in order to eradicate mental agony, physical struggle and delays in getting financial assistance. Corruption is also an important area while attention is required. Priority may be accorded in primary healthcare and medical treatment for senior citizens and disabled persons. Separate geriatric departments and centres may be established in the medical colleges and district hospitals. In addition, print, electronic and social media may be sensitized for the special needs of the senior citizens and also disabled persons (Awasthi&et al., 2020).

The whole world is getting affected seriously and unpredictably by the pandemic of COVID-19. Therefore, this is the most appropriate time to respond this critical situation. Each and everyone got affected by this pandemic. Thus this is also the responsibility of everyone to remove it by way of making use of NPIs (Non Pharmaceutical Interventions). Furthermore, there is need to follow all the guidelines issued by the national authorities which are provided by various ways which are available 24X7(Bhatia, 2020).

There is a need to develop a robust and receptive health system. This type of system could be able to run in a justifiable manner. For this, there is a need of proper financing for health. The previous and current epidemics reveal that there is little investment in the preparedness which could also result in saving of millions of lives (Dikid, 2020).

The most neglected segment in India is primary healthcare which is revealed by the availability of hospital beds in the country. Looking at the data, it is found that there are 7 hospital beds per 10000 people in India while in China there are 42 hospital beds per 10000 people, in Vietnam there are 26 hospital beds per 10000 people and in Bangladesh there are 8 hospital beds per 10000 people. Regarding health index, top five states are: Kerala, Andhra Pradesh (undivided), Maharashtra, Gujarat and Punjab while bottom five states are: Uttarakhand, Madhya Pradesh, Odisha, Bihar and Uttar Pradesh (EPW, 2020).

The transmission of COVID-19 is occurring very fast and it has reached several places from Kerala to Kashmir. Keeping the severity of the transmission, there is need of establishment of war room by the Prime Minister to be run by the task force with best national experts in order to design and also implement immediate, medium and long term strategies. This will also not only to help to diffuse authentic information on epidemics but also suppress fake news (John, 2020).

For the countries like India and United States of America, the numbers of cases are continuously increasing so it is critical to inhibit the disease from reaching community spread. Therefore, it is essential to initiate extensive testing for COVID-19 cases in the lines with South Korea in order to control the spread of virus (Kumar, 2020).

In the whole world, significant unpaid work was carried out by women and young girls. According to International Labour Organization, 76.2% unpaid care work is carried out by women at the international level. This work is more than the work carried out by men. It is noteworthy that there are about 50% of certified health workers are women in India. Due to COVID-19 and also extension of health services at home, women are not only overburdened but also have grander risk of infection. It is needless to mention that women are playing not only social roles as wives, mothers, daughters and sisters but also professional roles as nurses, paramedical staff and primary healthcare workers. Therefore, they are more prone than men to the viruses. The Ebola epidemic revealed that there was an adverse effect on pregnant women due to lack of scientific information, clinical guidelines and lack of pre and ante-natal care resulting increase of maternal mortality rate to 75%. Therefore, there is need to include women and other vulnerable groups in extending COVID-19 healthcare facilities (Misra, 2020).

The coronavirus disease has made a significant impact on the world community and this is the most serious pandemic in the history. Prior to emergence of this virus, there have been occurred numerous outbreaks of infectious diseases like smallpox, polio, cholera, chickenpox, zika, ebola and sars. This was initially known as “2019 novel coronavirus”. Later on, it was renamed as “Severe Acute Respiratory Syndrome Coronavirus 2(SARS-

CoV-2)” by the International Committee on Taxonomy of Viruses (ICTV) on 11.2.2020. The WHO has declared “COVID-19” on the name of the disease which is caused by it (Nath, 2020).

The disease of COVID-19 can be transmitted by so many material things including mobile phones. To address this issue, there is increased role of government agencies and also World Health Organization not only to generate public awareness but also to formulate Information Education Communication materials on mobile phones hygiene especially healthcare settings (Panigrahi, 2020).

There have been developed several diseases in the era of industrial revolution. But all these diseases have been effectively controlled by good public health measures like adequate ventilation, hand hygiene practices, better drinking water supply and also better standard of living. Moreover, due to development of antibiotics, a good control on these diseases has been found so people forgot these public health measures (Pardeshi, 2020).

In order to break the chain of transmission and hostile testing, there is a strong need of widespread approach. Moreover, there is need of early diagnosis and isolation along with proper treatment. These are the effective measures in order to prevent this spread of COVID-19 in future (Varghese, 2020).

There are 7 viruses in the family of viruses and corona virus is the 7th one while other 6 viruses are: SARS, MERS, 229 E, NL 63, OC 43, HK 01. The previous 2 viruses: SARS and MERS are serious viruses and can kill human beings. However, last four viruses: 229 E, NL 63, OC 43, HK 01 are less threatening. Under the microscopic observation of COVID-19 virus provides an appearance of crown so it was named coronavirus, derived from Latin; corona meaning “crown”. However, scientists have given a new name to COVID-19 i.e. Severe Acute Respiratory Syndrome Coronavirus 2 or in short SARS-Cov-2. The illness which is caused by COVID-19 is coronavirus disease 2019. It is also worth noting that coronavirus infects humans while other viruses of the family prefer to infect cows, pigs, bats and other animals (Venkateswaran, 2020).

Communication of Efforts Made by Government of India for Prevention from COVID-19:

1. Lock Down: To combat the rapid spread of COVID-19, the central government instituted a 21 days lockdown starting from March 25, 2020. This lockdown was further extended till May 3, 2020 and then till May 18, 2020 with certain relaxations. During lockdown, travel and movement were prohibited. Educational institutions were closed. Hospitality services and recreational activities were suspended. Moreover, religious gatherings were also prohibited.

Domestic and international travel was banned. Specific guidelines for COVID-19 in workplaces and public spheres were issued which are still applicable. These are: compulsory wearing of face cover, maintain social distancing, limit on marriage gatherings up to 50 guests and in funerals up to 20 persons and permission of limited staff in the offices and working from home as far as possible.

2. Observation of Janta Curfew and Lighting the Candles: India conducted some unique efforts to prevent COVID-19. On the call of Prime Minister Narendra Modi, firstly, March 22, 2020 was observed as Janata Curfew with the greatest sincerity and unity. In the evening at 5:00 P.M., all the countrymen collectively clapped, beat thali, tali and play conch-shell to thank doctors, nurses, policemen, guards and others like delivery boys...etc. The objective of Janta Curfew was to stay home to stay safe. This effort was also observed in order to show united of all the countrymen.

Secondly, on April 5, 2020, it was observed to light a candle or a diya or even use the flashlight on one's mobile to mark the country's fight against the COVID-19 pandemic. The objective of this activity is to defeat the darkness of despair and light our lives with hope. Moreover, on his request that "Corona means ko=koi, ro=road, na=nanikle" thus resulting Koi Road Par Na Nikle. In addition, he advised that there are same norms in India for everyone and are equally applied from Gram Pradhan to Prime Minister of the country. Thus, the norm of social distancing was fully observed by the fellow citizens in response to his advice.

3. Preparation of Vaccine: The preparation of vaccine in India is also under process. In this regard, three agencies are making their best efforts to develop the vaccine at the earliest. But, it is a matter of fact that there is neither any medicine nor vaccine for COVID-19 presently.

4. PradhanMantriGaribKalyanYojana for the Poor: This scheme was announced on March 26, 2020 with a relief package of Rs. 1.7 lakh crores rupees. In insurance scheme, health care providers and community health workers are covered comprising doctors, nurses, paramedical staff and ASHA workers fighting COVID-2019. This accident insurance scheme covers: loss of life due to COVID-19 and accidental death on account of COVID-19 related duty. This scheme covers all health workers working in government health centres, wellness centres and hospitals of the centre and the states. There is no age limit for this scheme. In this scheme, Rs. 50 lakhs will be paid to the claimant of the insured person. For taking benefit in this scheme, laboratory report certifying positive medical tests is required for loss of life on account of COVID-19. However, it is not required in the case of accidental loss of life on account of COVID-19 related duty. Moreover, this benefit will be provided to the claimant in addition to any other policy benefits. This scheme was initially announced for 90 days which was further extended till 30.9.2020.

In addition to the insurance scheme, the central government extended relief package to the poor dealing with COVID-19. So, they are getting 5 Kg. wheat or rice and 1 Kg. pulses for poor persons. This is above current entitlement under the National Food Security Act. This scheme was initially announced in March 2020 for three months which was further extended till November 30, 2020. A lump sum amount of Rs. 1000 was also provided to poor senior citizens, widows and disabled persons.

The central government also provided Rs. 500 per month to 20 crore women enrolled in the Jan Dhan Yojana scheme. Moreover, free cooking gas for three months was provided to 8.3 crore Pradhan Mantri Ujjawala Scheme beneficiaries.

5. Other Measures: The central government has sanctioned Rs. 15000 crore towards the COVID-19 emergency response and health system preparedness package to utilize Rs. 7774 crore for immediate COVID-19 response and remaining funds for medium term support in the next four years. This fund will be utilized for developing diagnostics and COVID-19 dedicated treatment facilities, procuring essential medical equipment's and drugs, strengthening central and state health systems to prevent and prepare for future disease outbreaks.

A special economic package of Rs. 20 lakh crore was announced under AatmaNirbhar Bharat Abhiyan Package. The aim of the package is to prepare the country for the tough competition in the global market and also to empower the poor, laborers and migrants who were adversely affected by the pandemic. The objective is to maximize the use of local resources and to discard products of foreign countries. The wages under the Mahatma Gandhi National Rural Employment Guarantee Scheme were also increased from Rs. 182 to Rs. 202 per day.

6. Testing of COVID-19 Cases: According to Indian Council of Medical Research, there are a total operational (initiated independent testing) laboratories as on 19.9.2020 are government laboratories are 1061 while private laboratories are 712 thus comprising a total of 1773 laboratories in India. These laboratories in consultation with Indian Council of Medical Research are engaged in extensive testing, case identification, isolation, treatment of cases, meticulous contact tracing, home quarantine of contacts and localized restrictions on movement in some cases.

Regarding the level of transmission of COVID-19, it is in community transmission stage in United States of America and Brazil while in India is cluster of cases. It is noteworthy that the cluster of cases stage is better than community transmission stage, which is the highest stage. Furthermore, WHO has described four levels of COVID-19 transmission. These are

countries or local areas with: 1. No cases reported, 2. Sporadic cases, 3. Cluster of cases (grouped in place and time), and 4. Community transmission.

Table 1: Definition of the categories for transmission pattern:

Category number	Category name	Definition
1	No cases	Countries/territories/areas with no cases
2	Sporadic cases	Countries/territories/areas with one or more cases, imported or locally detected
3	Cluster of cases	Countries/territories/areas experiencing cases, clustered in time, geographic and/or by common exposures
4	Community transmission	Countries/areas/territories experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: -Large number of cases not linkable to transmission chains -Large number of cases from sentinel lab surveillance -Multiple unrelated clusters in several areas of the country/territory/area

Source: WHO, 2020

Table 2: Data on COVID Cases in India

Sl. No.	Date	Confirmed Cases	Cured/Discharged	Death
1.	31.3.2020	1397	124	35
2.	30.4.2020	33610	8373	1075
3.	31.5.2020	190535	91819	5394
4.	30.6.2020	566840	334822	16893
5.	31.7.2020	1638870	1057805	35747
6.	31.8.2020	3621245	2774801	64469

Source: Monthly Policy Reviews, March-August 2020, PRS Legislative Research (www.prsindia.org)

It is also pertinent to mention that the data has been taken at the end of every month. The above data reveals status of confirmed cases as the confirmed cases have increased 24.06 times from March to April, 5.67 times from April to May, 2.97 times from May to June, 2.89 times from June to July and 2.21 times from July to August. It is noteworthy that the ratio of increasing confirmed cases is continuously decreasing.

Looking at the status of cured/discharged cases, the cured/discharged cases have increased 67.52 times from March to April, 10.97 times from April to May, 3.65 times from May to June, 3.16 times from June to July and 2.62 times from July to August.

Looking at the status of deaths, the deaths have increased 30.71 times from March to April, 5.02 times from April to May, 3.13 times from May to June, 2.12 times from June to July and 1.80 times from July to August.

Thus, it is revealed that the status in towards improvement as number of confirmed cases in August 2020 has decreased in comparison to previous months and number of deaths in August 2020 has also reduced in comparison to previous months. Thus India is progressing towards addressing this issue.

Conclusion:

‘Prevention is better than cure’, a famous proverb is best suited to the situation of pandemic COVID-19. Since there is no proper treatment of COVID-19 so ‘prevention is the only cure’. Furthermore, immunity plays a significant role in facing the COVID-19 so there is a need to disseminate information on health communication to increase immunity to the public by making use of indigenous and traditional knowledge. The natural dependence system (immunity) may be increased by way of taking balanced and nutritious diet, taking exercises and yoga and also not consuming wine, drugs and smoke.

The situation of India is alarming due to being second most affected country from the COVID-19 in the world. More importantly, there is no medicine/vaccine so there is need to focus on IEC (Information, Education and Communication) model to prevent spread of COVID-19.

A health communication manual may be developed containing information on symptoms of COVID-19, preventive measures from COVID-19, modalities when infected and post COVID-19 precautions by science and social science community.

The fake and misinformation are very harmful so there is an urgent need to curb such information. So, there is need to filter the information before dissemination. It has been observed that fake news and misinformation have been circulated on social media platforms. Therefore, measures in the form of advisory issued by the Ministry of Electronics and

Information Technology (MeitY) on March 20, 2020 to curb misinformation on COVID-19 on social media platforms may be implemented strictly.

The year of awareness on science and health introduced by Government of India have a good hope to make the citizens of the country aware. The concept of making awareness needs interdisciplinary approach so there is need to make efforts by science and social science community of the universities in unison. The information provided by scientific institutions communicating authentic information on COVID-19, comprising WHO, ICMR, VigyanPrasar, DST and NISCAIR need to be believed.

According to media reports, a total of 125 suicide deaths occurred due to fear of infection, losing of jobs, loss in business, inability for social interaction and loneliness, lack of freedom of movement and inability to go home during lockdown. This is a reflection of the inability of the country to manage mental health of the people in lockdown phases and also post lockdown phases. There was one fake news that applicants appearing in the Union Public Service Commission Preliminary examination this year will have to get tested for COVID-19. Furthermore, there is need to quash fake news in order to communicate scientific information in the society. Thus there is need to develop a mechanism to address stress management. The concerted efforts made for prevention of COVID-19 could not prevent infection of COVID-19. So, it reveals that the efforts made till now are not sufficient to address the global pandemic. Therefore, suggestions are provided for implementation in order to address the gravity of the pandemic.

Suggestions:

1. The concept of social distancing is not so popular in rural areas so there is need to popularize it by making use of electronic and print media.
2. The struggle against COVID-19 is multi sectorial, multi ministerial, multinational and extraordinary in nature. Thus, COVID-19 will most likely remain a long term threat to the whole humanity. Thus, there is need to work unison by all the stakeholders. It should be developed to bring in our habits that we may live safely with corona. Consequently, there is need to propagate this message in the society in order to make mind by the public towards long time facing this pandemic.
3. Public Health Services are the lifeline of societies so there is an urgent need to upgrade these services and meanwhile all the services provided may be communicated to the public regularly.
4. There is need of better coordination between districts, states and central government for addressing the challenge of global COVID-19 pandemic and all the efforts may be informed to the public.

5. An online infodemic and grievance portal may be developed at the central level in order to address the issue on a timely manner.
6. Public information campaigns may be organized by district public information officers and local non-government organizations in the regional languages.
7. There is one common feeling among the people that I shall not be affected, which is a dangerous thing. So, it may be changed because it is the need of the time.

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