“Infodemic” of COVID 19: More Pandemic than the Virus

Abstract

Coronavirus disease (COVID 19), which was started in Wuhan, China in December 2019 has become a pandemic, leading to unprecedented risk to the human race. The majority of affected have mild illness resolving spontaneously, but 10%–15% of patients develop serious complications like severe acute respiratory distress syndrome (ARDS), septic shock, and multiorgan failure.[1,2] WHO and global leaders along with medical fraternity started tremendous efforts to protect citizens and contain this pandemic.[3] However, fear and panic wave accelerating ahead of the pandemic worldwide, which is being driven by prejudice or erroneous information. This has not only triggered discrimination and stigma of disease but also lead to hindrance in rapid response policies of health officials and policymakers.[4] While working in a pandemic environment, healthcare workers (HCW) have also developed physical and mental fatigue due to the loss of patients as well as their colleagues, creating fear and panics for them as well.[5] Such issues need to be addressed earliest and must be resolved.

“Infodemic” of COVID 19

As the COVID 19 cases continue to spread across the country, and the information about difficult to treat severe acute respiratory illness disseminate, information flows at much faster than the virus from social media and private unfiltered networks like WhatsApp, Facebook, Twitter, YouTube, TikTok, etc., Mostly such information about the illness is often derived from preliminary observations, and hence is often unreliable and speculative. However, it does lead to lots of confusion, panic attacks, and anxiety amongst citizens. This situation was recently described as “infodemic” by the World Health Organization (WHO).[6] Commenting on the burning issue of COVID 19 globally, social media like Wall Street Journal also used “infodemic” quoting as “when unreliable information spreads far and wide”. Such uncontrolled information can be dangerous in the sense that policies implemented to control the pandemic become more difficult. Hence the important factor in the current pandemic is to provide authentic information from reliable sources.

Infectious Disease and Psychology

We know people response to highly infectious diseases can lead to the development of fear, stress, anxiety, sense of insecurity, and prejudicial behaviors, especially when the infectious disease outbreak is sudden with rapid spread, making it pandemic along with fatalities.[4] In history, epidemics of infectious disease...
have been associated with specific community groups, which prompted fear, stigma, and discrimination to concerned ethnicity. This has been observed in outbreaks of typhus fever and cholera in Russian Jewish immigrants, bubonic plague in Chinatown community, hantavirus infection in Native Americans, severe acute respiratory syndrome (SARS) outbreak in the Chinese population.\cite{8} Previous studies had documented similar reactions with inability to implement containment measures for infectious diseases like tuberculosis, leprosy, and HIV/AIDS. The fear and anxiety of being labeled as a potential source to transfer SARS were so traumatizing for patient’s subgroup that it created stigma for whole society.\cite{9}

Fear and stigma of the disease usually go hand in hand and fearful minds can lead to hatred or stigmatize a subgroup of the population. This stigma can be related to a particular race, region, descent, and country where the disease started but can go up to continents and beyond.\cite{8} In an attempt to contain the pandemic, WHO and other national authorities have advised isolation of active cases, quarantine of close contacts, sealing off hotspots, nationwide lockdowns, and domestic travel and visa cancellation with an aim of stopping international travel. While it helps in controlling the spread of disease, this also causes fear, discrimination, and suspicious behavior amongst the people and may affect important supply chains. It also can lead to the development of not only obsession and multiple somatic complaints like chest tightness, difficulty in breathing but also the occurrence of insomnia, lethargy, loss of concentration, anger, and depression.\cite{8,10}

**Impact of Fear of Disease**

Epidemiological studies about infectious disease outburst showed that though the general population needs prompt information related to the latest development, a high-risk subgroup is exposed to the danger of fear, stigma, and discrimination of disease, which needs to be addressed by healthcare professionals and policymakers. This stigma with fear of disease in AIDS had adversely impacted the testing and treatment of infected patients. Similar unwillingness for testing and treatment of tuberculosis has been noticed by medical staff in an immigrant population. Also, studies have shown that the incidence of posttraumatic stress disorder (PTSD) increases after any infectious outbreak.\cite{8,6} The classical example of such an illness is SARS, which gave rise to global anxiety due to highly contagious nature and rapid spread through international travelers. Some amount of panic reaction can be rational, but high mortality rates and epidemic spread of such outbreaks can have a more harmful impact in the form of anger, blaming, and violence against people from the area of disease origin.\cite{9}

Due to social media infodemics, people got more confused and became hyperreactive leading to unbelievable scenarios in the current COVID 19 pandemic.\cite{10} As the disease can spread from droplets, people have manhandled persons in the public places after sneezing due to the fear of disease. When isolation of cases or contacts started and lockdowns imposed as a control measure, some people not only noticed weariness and loneliness but also scared that lead to occasional suicidal tendency. One person jumped off from terrace to end his life due to the fear of disease when he was hospitalized for COVID 19 while another has killed himself to protect his community members. People from disease hotspots are so scared that they are not going out for the treatment of other ailments as well. Villagers’ reaction is so furious that they are not allowing people from urban areas to enter into their villages, with an idea that this infection is of an urban area and should not come into the rural area. Also, as there is no specific treatment or vaccine for COVID 19 till now, it is fueling more fear among the general population.\cite{10,11}

HCW also develop psychological effects due to COVID 19 when it leads to intense workload along with the fear of getting infected while handling patients on a large scale.\cite{8} Print and social media reports incidents of HCW facing discrimination and not allowed to come back to their home and also rejected by asking them to evacuate rented premises.\cite{11} Unavailability of sufficient personal protective equipments have already created a fearful wave in minds of HCW, which impacted in a hazardous way to close down their daycare clinics or OPDs. Like everybody, HCW are also exposed to rumors and wrong information from social media infodemic apart from exposure to infected patients, fueling in their apprehension to work in an infected environment. This is further strongly affected by increasing stigmatization and mistrust among their societies.\cite{6,12} Discrimination and racism going on peak especially for Asian people after social media posts accusing a country about using the virus as a bioweapon, which created many theories and conspiracies. This pandemic is exposing all negative aspects of human mentality rather than solidarity.\cite{11,13}

**Strategies to Counter Fear of COVID 19**

To mitigate the fear of infectious disease outbreak and counter all the infodemics related to it along with protecting public health is complex but an important part of public health crisis management. All harmful impacts of fear of disease need to be evaluated and managed with the help of mental health experts with behavioral modification and spreading awareness, which helps in preventing stigmatization of the population at risk.\cite{9}

The most integral step to reduce this fear and stigma of COVID 19 is education and authentic transparent information from reliable sources. This rapid dissemination of authentic information is of the greatest importance not only for the prevention and control of epidemic outbreak but also the infodemic. Motivating people about preventive measures like hand washing, use of masks, and social
distancing while in a public place through educational campaigns is important. A 24 × 7 helpline along with daily press release policy like situation updates as is being done by many national authorities is a significant step towards containing misinformation.\textsuperscript{[13]} Celebrities and national leaders should open up on social media when affected by COVID 19, which can remove the stigma and improve willingness for self-screening of disease. This transparency of epidemic information can inspire the general public to report their symptoms of disease and travel history. Social media like television, radio channels, newspapers, and private networks connected through the internet should be utilized for promoting the myth buster educational materials. Additionally, public and private hospitals should activate mental health clinics, which can address panic reactions along with removing rumors or doubts among the general population.\textsuperscript{[11,14]}

Another important tool is developing the behavioral strategy to answer the needs of ethnic groups facing the stigma and discrimination of disease. This is an excellent complementary strategy for general health educational campaigns, which can be appropriate to the personal needs of affected ones by forming a community outreach team for the behavioral strategy implementation. The team can document and monitor the reactions and ideas of people leading to stigmatization. This team makes a special focused plan with community field visits, group discussions, rapid situational assessment, and response with targeted health educational materials. This can create awareness with better evidence-based information; removing myths, misconceptions, and reserved thoughts; motivates to create community resilience among peoples at risk; and providing reassurance with integrity to affected ethnic groups at an individual level. Such a strategy had been successfully utilized during the SARS epidemic.\textsuperscript{[9]}

Employers should stress up about the importance of personal preventive measures and clarify organizational policies for responding about COVID 19 cases among staff members while maintaining privacy and confidentiality. This can remove fear, stigmatization, and discrimination of being affected and ensure a secure job after complete recovery.\textsuperscript{[15]} Stamping on the hand of a person infected with COVID 19 and house labeling having an infected person may not be a good idea in the current pandemic; rather it may increase the discrimination among society and people having symptoms suggestive of COVID 19 and people may not come forward for testing.

Finally, we have to keep in mind and gear up for upcoming PTSD in the current fearful scenario of this COVID 19 pandemic with a multidisciplinary approach. This may include the formation of mental health teams, which includes psychiatrists, clinical psychologists, and trained nurses; developing electronic apps for psychological counseling; addressing the personal needs of the large populations for wider reach; and rapid communication of updated COVID 19 situation regularly.\textsuperscript{[16,17]}

**How to Fight an Infodemic**

It is reasonably apparent now that fear of virus (F-virus) created by social media is more contagious to the general population than COVID 19 itself. To fight this infodemic of COVID 19, WHO has a newly launched information platform called WHO Information Network for Epidemics (EPI-WIN), which provides advice and guidelines to various professionals and also receiving information.\textsuperscript{[6]} Especially, paying attention to trustworthy information, taking a break from social media coverage, exercising, and dedicating time with family and friends are recommended for coping with stress while staying at home in lockdown.\textsuperscript{[15]} While fighting this infodemic causing panic everywhere, we have to flourish new mental contagion, which is of healthy ideas, boldness, and solidarity. This is not a time to divide over ethnicity, nationality, or regionalism as the virus does not respect international borders. This is a time for global cooperation to fight back against the virus.\textsuperscript{[6]}

**F-virus and Non-COVID Health Side Effects**

Patients suffering from nonCOVID chronic diseases being unable to access the required medical care have come to light and some have even lost their lives. The closure of services like regular OPDs and surgical or other facilities requires a relook. This F-virus may have contributed to the worsening of co-morbid conditions like diabetes, hypertension in elderly patients with or without COVID-19 and may be contributing to higher mortality in them. Media reports from India that patients with kidney failure denied lifesaving dialysis and the patient’s cancer chemotherapy is delayed in the absence of laboratory reports.\textsuperscript{[11]} COVID 19 screening being asked in many tertiary care hospitals before any treatment or elective surgery, which has now become a standard prerequisite.\textsuperscript{[19]} This collateral damage caused by COVID 19 is immeasurable and mostly being overlooked for the time being but maybe causing more morbidity and mortality than COVID 19 itself. Additionally, the lack of adequate pandemic preparedness plans, which may be due to economic and human resource limitations, leads to higher mortality rates\textsuperscript{[19]} and maybe a factor responsible for infodemics. Social injustice and discrimination leading to communal violence has been already known in previous pandemics\textsuperscript{[20]} and can occur during COVID 19 pandemic crisis for which we need more vigilance and be prepared to tackle debacle.

To conclude with a positive note, this pandemic of COVID 19 is still not settled in many countries, but will not last forever if we follow social distancing, hand hygiene, and cough etiquettes without the fear and stigma of the disease. For which we need to invest more in strategic planning to counter this worldwide infodemic.
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There are no conflicts of interest.

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