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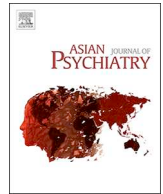
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## Asian Journal of Psychiatry

journal homepage: [www.elsevier.com/locate/ajp](http://www.elsevier.com/locate/ajp)

## Cognitive biases operating behind the rejection of government safety advisories during COVID19 Pandemic



To the Editor,

The diseases have always been a stressful condition for individuals and communities. If the illness is communicable and there is risk of high mortality, then there is a mass reaction to it. During the current times, most parts of the world are facing a deadly virus called the Novel Coronavirus. The mechanism of how this affects people in their minds is of concern in this article.

Technology has provided people with access to the world even in the remotest, so since late of 2019 there was an outbreak of viral infection in Wuhan of mainland China which is being observed by the world. By the 31st of December, the Chinese Government reported that there had been an influx of cases of pneumonia from an unidentified reason (Li et al., 2020; Wu and McGoogan, 2020a). That was later identified as Novel Corona Virus Influenza.

There was a close off of Wuhan by shutting it out of all the places buses, trains, flights were cancelled. There was panic across the city 17 people had died and 570 of them had been infected by that time (Li et al., 2020). Cases from Taiwan, Japan, South Korea, Thailand, and the US had been reported (Wu and McGoogan, 2020b). The WHO named the novel Corona Virus Disease as coronavirus infectious disease of 2019, "COVID-19" (*WHO Director-General's opening remarks at the media briefing on COVID-19—11 March 2020, n.d.*). World Health Organization (WHO) declared 'COVID-19 Pandemic', which has become the cause of global stress.

Directives have been issued by a lot of international agencies including the United Nations for the control and management of COVID19. Countries are facing lockdowns to stop the transmission of the disease, leading to large economic crises throughout the world. The international crisis has been associated with the economic downfall leading to profound effects on the human psyche (Zandifar and Badrfam, 2020)

This article aims to identify the psychological issues faced by the people in such situations and conceptualizes the reasons behind such issues. One of the most common responses nationwide was the denial of the illness, now the advisories are not being taken seriously by people (Banerjee, 2020). By carefully watching these responses some patterns can be observed. They are can be arbitrarily explained through a few existing theories. The cognitive biases that have been observed during this lock down violation primarily are framing and over confidence. The presentation of the facts by the information portals, mass media and social media has the capacity to portray facts in ways that can be perceived in different ways (Gearon, 2018). The overconfidence of people on their health status and existing medical and faith systems inhibit their cognition to take the governmental policies seriously and defy them (van der Weerd et al., 2011).

### 1. The grief theory

The "Kubler- Ross theory of grief" can be related to the behavior of the masses in the current scenario. According to Ross, there are 5 stages of grief acronym used is DABDA, Denial, Anger, Bargaining, Depression, and Acceptance (Chen et al., 2020). If we observe the behavior of the people initially that could be a mass behavior of denial. When the number of cases increased and fatality occurred we observed that the city of Wuhan were blamed which can be compared to the state of anger in the grief theory. The people used their denial as a tool to overcome the grief of the loss and travelled as if there were no issues. This led the disease to spread even more rapidly, then people isolated the city (Wu and McGoogan, 2020a). Initially enforcing the shutdown was protested massively and bargained to get out of the situation. Then came the depression, the hue and cry for lack of resources followed by acceptance of the current threat. They set up temporary hospitals to build factories to provide consumables like masks and cope with the emergent epidemic (Wu and McGoogan, 2020a). We can still observe similar behaviours' here people are trying to avoid isolation or going about through their business. It has been observed in Iran that people during pandemics become more prone to common mental disorders like Anxiety and depression (Zandifar and Badrfam, 2020). Indian people are still in the state of denial and are unable to follow through the quarantine process put in place for all the suspected and cases (Banerjee, 2020). People have violated their quarantine and are behaving irresponsibly leading to problematic situations for themselves and their communities. Anxiety levels are rising in India as well.

### 2. The psychoanalytic theory

The behavior of people in the world can be described through the defence mechanisms that Freud had suggested. Freud believed that human beings always desire to be in a pleasurable state. Whenever they face difficulty they try to use their primary defence mechanisms to get over their difficulties (Kalpan and Sadock, 2000). So in the face of the crisis of corona people of Italy initially repressed their emotions and carried on their work, which then became overwhelmed due to the outbreak of COVID19 leading to the usage of the defence mechanisms of denial and projection. Countries like Italy and India are blaming the Chinese Government and the WHO for the pandemic and hateful messages are prevalent on social media. People are showing anger and hatred towards specific ethnicities hate crimes have increased in the USA and Europe against the Asian people blaming them for the spread of the pandemic (Bults et al., 2011). Hate crimes have increased in India as well. The legal warnings have also failed in many cases where people have collected. To observe such a scenario the protests against the

<https://doi.org/10.1016/j.ajp.2020.102048>

Received 25 March 2020

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Citizenship Amendment Act are continuing. During the self-imposed curfew in India on 22-03-2020 people came out on streets as if there were celebrations, which was against the law that day which compelled the authorities to take steps in country wide lock down in India.

### 3. Rosenstock's health belief model (1966)

This model given by Rosenstock can also explain the behavior portrayed by the masses. He believed that the perceived health benefit and perceived health risk can tremendously affect the health behavior of people (Bristow, 2010). If the people perceived importance of the health behavior only then they would abide by the advisory if they perceive it otherwise their congruence with the health behavior will not be appropriate. This also has to do with their pre-existing belief system (Morganstein and Ursano, 2020). The misinformation from various sources with negative attitude increase the levels of stress and anxiety (Goyal et al., 2020)

### 4. Formation of attitude

Beliefs can be defined as ideas that people hold to be true, which can take several forms like, rational beliefs, irrational beliefs, faith, and stereotype. Understanding the behavior of people in masses during crises situations can be due to their belief systems these belief systems give rise to their attitudes, that influence their decision making leading to certain predictable behaviors (Townsend, 2014). In the current scenario, we are observing that the cultural background of people is affecting the decisions made by them in the COVID 19 pandemic. We can observe that different nations are responding to the threat of coronavirus by different behavior (van der Weerd et al., 2011; Zandifar and Badrfam, 2020). These attitudes can be two types, negative and positive, positive attitudes help in coping and adaptation but negative attitudes hinders growth and survival. The attitude of people about social distancing, quarantine, health protection, and essential supplies has been a matter for concern in the mental health fraternity (Banerjee, 2020). The difference in the attitude of people all over the world has brought simple ideas and concepts to test (Xu and Peng, 2015). There have been frequent violations of guidelines of the government and authorities like the WHO and the United Nations. This is leading to the spread of the Pandemic and affected a major part of the world population. The previous pandemics of Ebola and H1N1 reported that with passing time and attitude of the people changed and more supportive and abiding behaviors were observed (Bults et al., 2011; van der Weerd et al., 2011; Xu and Peng, 2015). Mental health providers can play a crucial role in helping people in these distressing times (Banerjee, 2020).

### 5. Conclusion

COVID19 is a biomedical disease and apart from the physical health implications the pandemic has instituted a cycle of negative thoughts and emotions in the people's mind. No doubt it is a difficult time for humanity. The COVID19 disease is not only has infected people in the body but the impact it has on people's minds is tremendous. The positive cognition and positive adaptable attitudes will be able to revive the people from the on-going threat of Novel coronavirus Severe acute respiratory syndrome (COVID19). The studies have shown 11 % of COVID19 care takers have developed a stress reaction symptoms such as anxiety depression hostility and somatization. COVID19 is a deadly game, and the people can only win it by playing it safe, quarantine, socially distancing is the key to protect from infection and as always prevention is better than cure!. Mental health professionals should equip themselves in handling the surge of mental health issues post the pandemic crisis.

### Financial disclosure

No financial support whatsoever.

### Declaration of Competing Interest

No Conflict of interest.

### Acknowledgement

No acknowledgements.

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