

## Impact of Covid-19 Pandemic on Mental Health

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### Abstract:

**Introduction:** The year 2019 will be remembered in the human history by the mark of an unknown diseases plaguing the whole world with its devastation, namely coronavirus disease 2019 (COVID-19). This pandemic caused by a novel strain of RNA virus has caused a catastrophic health outcome for millions of world citizens but in many cases only the physical aspect of the disease came under consideration. **Materials & Methods:** This review is based on ample literature search of Medline, the Cochrane Database of Systemic Reviews, and citation lists of relevant publications.

**Discussion:** COVID-19 pandemic has caused a variety of health problems including mental health issues. Initial panic about the completely unknown (Novel) virus plaguing the world was soon joined by an array of mental health problems like anxiety, depression, combined anxiety and depression, traumatic stress etc. Amidst the chaos of unpredictability, mortality, overstretched health facilities etc. we often downplay the importance of paying attention to the mental side of the disease spectrum. As a result, outcomes like child abuse, domestic violence and suicide can increase. **Conclusion:** It is of utmost importance to educate mass people about the coping strategies to go through this hard time, to ensure proper news sharing, to screen people who are at risk of developing mental health problems and to provide support to those who are in need. Local and International consensus guideline should be planned to deal with this issue.

**Key-words:** COVID-19, Mental health, Pandemic, SARS-CoV-2.

**Number of References:** 28; **Number of Correspondences:** 03.

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### Introduction:

As a part of normality of human life, we encounter various stressors daily. Although feeling stressed on and off can be of value from existential view point, the overwhelming coercion can be counterproductive. This strain is coped well by many but has the potential to push some to the realm of mental dismay. We, as a race, are facing an unprecedented threat to our graceful living due the emergence of the novel corona virus pandemic. Starting as a cluster of pneumonia cases with atypical features in a wet market of Wuhan, Hubei Province, China<sup>1</sup>, the new disease soon crossed border and affected millions across the globe. The causative organism was identified as SARS-CoV-2 (Severe acute respiratory syndrome 2)<sup>2</sup> and the disease named as COVID-19 (corona virus disease 2019). Severe acute respiratory syndrome 2 virus is a highly transmissible, non-segmented, single-stranded, and positive-sense RNA genome virus belonging to the large family of Coronaviridae. They are called so due to their crown-like (Latin Corona: Crown) structures seen under microscope<sup>3</sup>. Corona viruses can affect many animals and was circulating among them for long. The human infection is relatively newer and known since 1960s. The species

jump can be a spillover event that took place now and then. Although most of the members of this RNA virus family cause mild influenza like illness in human, three of them has already caused widespread severe disease earning pandemic status. Those three viruses are severe acute respiratory syndrome virus (SARS-CoV), Middle East respiratory syndrome virus (MERS-CoV) and finally the current pandemic of SARS-CoV-2. All the three pandemic causing viruses are beta coronavirus. The novel coronavirus shares 79% of its genome sequence with SARS-CoV and 50% with MERS-CoV<sup>4</sup>. SARS-CoV-2 infection can be traced back to contact with a local seafood seller in Wuhan that illegally sold wildlife animals including bats<sup>5</sup>. Life is not the same ever since this new unseen enemy has started to spread like a wildfire. Global disruption of this scale has the potential to perpetuate pre-existing or new onset mental health issues. In this paper we have tried to focus on the impact of the pandemic on psychological rather than the physical health.

### Materials and Methods:

This paper stands on extensive search of relevant articles and citation lists of pertinent publications. Subject heading and key words used include SARS-CoV-2, COVID-19, Mental health, psychological impact etc. Only articles written in English were included.

### Discussion:

#### COVID-19 AS a STRESSOR

People are surprisingly resilient. Most of us can overcome the first hit of a short lived calamity without being succumbed into any mental ailment<sup>6</sup>. For a disaster lasting for months like COVID-19, the same may not be the case. Stressors like greater Confinement, trouble having adequate supplies, difficulty securing medical care and medications and financial losses have impacted people individually and collectively<sup>7</sup>. Other vital stress elements are fear of

exposures, infected family members, death of loved ones and inability to be with others for physical distancing<sup>6</sup>. While trying to keep the world citizens up-to-date about the ins and outs of the crisis, the social media can in fact act as a stressor leading to anxiety, depression or a combination of both<sup>8</sup>. On the other hand, the uncertainty associated with the progression of the course of pandemic and the unpredictability of the seriousness of the disease was found to be a contributing factor to stress for many<sup>9</sup>.

### At Risk Population

Everyone has a unique way of adapting to face challenges. Some are more vulnerable than others to suffer from psychological impact of COVID-19 pandemic. Study showed, People who were tested positive for COVID-19 or at increased risk to contract the disease (Elderly, immunocompromised etc.), had pre-existing medical or psychological illness or had substance abuse problem were at heightened risk of adverse psychological outcome<sup>10</sup>. Moreover, people with pre-existing mental disorder were found to be at risk of relapse during this pandemic<sup>11</sup>. Other researchers have found homeless people, migrants and pregnant ladies to be at more risk for mental problems<sup>12-14</sup>.

Often we forget to pay attention to the doctors who are equally human as their patients and thus have their own sets of vulnerabilities<sup>15</sup>. The hefty workload, physical and mental exhaustion, fear of getting infected or transmitting it to loved ones, going through the days without appropriate supplies of personal protective equipment can all put a hulking pressure on a physician<sup>16</sup>. A Chinese study on health professionals reported that, more than half (50.7%) of the participants had depressive symptoms, 44.7% anxiety, and 36.1% sleep disturbance<sup>17</sup>.

### Spectrum of the Problem

We are often oblivious of the fact that, pandemic related broad range of mental ailments is a very crucial part to be addressed. It is well established from our past experience with EBOLA<sup>18</sup> and SARS<sup>19</sup> that, a health crisis of this amplitude has a great potential to manifest itself as a mental disorder or escalating the already existing problem. Research showed that, COVID-19 pandemic is associated with psychological distress<sup>20</sup> and can cause mental health crisis especially in areas with high case burden<sup>21</sup>. Researcher in Wuhan, China have published study demonstrating markedly increased level of anxiety, depression and combined anxiety depression associated with COVID-19 outbreak. Their study also showed that people who are more exposed to social media are more vulnerable to anxiety and combined anxiety depression<sup>22</sup>. Pre-existing mental health issues were found to be at increased risk of relapse due to the stress associated with COVID-19<sup>23</sup>. Moreover, mental illness itself increases the susceptibility of infection<sup>24</sup>. Lockdown has already redefined the normality of life but this is even a harder knock for the people suffering from a previous mental sickness. Regular follow up visit to Doctors are kept held for many which can potentially increase the risk of psychiatric emergencies<sup>25</sup>.

### What Can We Do?

To mitigate the risk of adverse psychological impact of this pandemic many countries have taken their own customized approach. As for example, China, where it all started, has integrated psychological crisis intervention and issued the 'Principles for Emergency Psychological Crisis Intervention for COVID-19 Pneumonia Epidemic'<sup>26</sup>. Chinese have proposed the principle to combat the situation as a three principle approach: elucidating the mental impact of this outbreak, identifying people who are at high risk and providing appropriate support for those in need. Others have proposed that, mass communication media can be used to communicate with people by uploading educational videos, lectures and psychological self-help measures. These will help to ease the stress and will enable people to cope well. These messages can be crafted by health care professionals and be delivered by society leaders<sup>27</sup>. Mental health professionals have a huge role to play. They can continue consulting patients using virtual platforms, help the community at large to enlighten them about the potential of pandemic to cause debilitating stress and how to deal with that. At a personal level, general people can plan ahead to go through periods of physical distance, financial hard time etc. and can use social media judiciously to maintain online interaction<sup>28</sup>.

### Conclusion:

When a pandemic like COVID-19 strikes, we tend to focus on the infection itself and the physical aspect of it. Mental health issues are so often forgotten and people suffering from them stigmatized. We have seen suicide, domestic violence and child abuse to skyrocket amidst this pandemic. These are real and there is no denying of the fact that, global disruption of this scale has a tremendous impact on mental health. This difficult time has provided us an opportunity to have our policy in place on how to deal with this issue effectively. Although long term mental effect of COVID-19 pandemic will take time to be apparent, we already have enough evidence of short term psychological disruption including anxiety, depression or both. From top down, we should be vigilant about the "Infodemic" as it may perpetuate the negative impact of pandemic. Physicians should be trained to screen psychological distress and to channel awareness to uplift positive coping mechanism among general population.

**Conflict of Interest:** None.

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