

**Journal of Pharmaceutical Advanced Research****(An International Multidisciplinary Peer Review Open Access monthly Journal)**Available online at: [www.jparonline.com](http://www.jparonline.com)**Evaluating the Impact of COVID-19 on Mental Health problems in Indian context****R.Lokeshvar\*, N.Deepa, K.Madhivadhani, P.Divya, M.Asuvathaman**

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**ABSTRACT:** Coronavirus 2019 (COVID-19) is impacting every family financially as well as emotionally. There is a panic situation existed throughout the world. Due to the presence of Novel Coronavirus, there are innumerable defects and changes existed in everybody's routine activities of daily living and other recreational tasks. As the pandemic outbreak in India was on-going, the Government of India took stringent measures to limit the cases by far in that stage only, by initiating a major lockdown pan-India and also by shifting the immigrants to the special quarantine facilities prepared by the Indian Military directly from the airports and seaports for a minimum of 14 days. The lives of people were drastically affected with lock-down and fear related to the disease's potential effects and transmission. The fear due to the contraction of COVID-19 is on the rise because of the death tolls and global spread. For low income country like India, financial crisis had troubled the lives of everybody. For older adults, there is a fear of death as well as fear of saving the lives of their loved one. Adapting to this new normal life is a real challenge for older adults in middle and low economic zone like India. Indian people are going through a myriad of psychological problems in adjusting to the current lifestyles and fear of the disease.

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**INTRODUCTION:**

Large scale psychological impact in Indian context was known to have emerged from the COVID-19 pandemic. Pandemic induced distress includes fear of the coronavirus spread, anxiety related to orientation towards the future, sorrow, isolation of self, distress by isolating family members and the majority of the adults suffering with mental health problems. There is a worsening of mental disorder and alcohol abuse. Road side dwelling adults were suffering with humanitarian aid related troubles as they had panic attacks due to the lack of information about food distribution. Worsening economic issues during the pandemic outbreak were

reported to a larger extent in Indian context and the majority of the adults suffered with poverty and there is a drastic decline in income generation as well as 80 % lost their jobs with spot termination and size reduction in jobs. After the announcement of the first lockdown, there is a drastic decline in income generation and disruption of social networks will be there. Suicidal risk was higher due to the fear of virus transmission<sup>[1]</sup>. At the emergency stage of virus transmission, people who work in temples and churches lose their daily routine and their mental wellbeing is affected. People with large and small families tends to spend their good times during the initial lockdown as they provide enough time to stay indoor with family members but individuals who were not together with their family members lost their communication and they faced difficulty to reach their home town and the closed boundaries between states and countries make them depressed and suicidal attempts were higher. After the subsequent lockdowns there is increased domestic violence against women's. During the pandemic spread there were emergencies like transportation to native places, storage of food and other groceries, storage of essentials was done by people and the poor were left without the supplies of basic needs and the emergency needs were left without consideration and that affected masses<sup>[2]</sup>.

Individuals with pre-existing vulnerabilities suffered a lot with COVID-19 symptoms and without confirmatory diagnosis as COVID-19, majority of adults consider common cold and flu symptoms as COVID-19 virus and attempted suicides. This epidemic threatens people's lives and even within the family members, there is a fear of contagion. Normal activity of daily living is affected. The psychosocial impact developed by the COVID-19 pandemic exceeds the Indian management system and it resulted in high levels of distress. The psychosocial impact will persist forever even after the outbreak has ended. Studies on psychosocial impact among Indian adults revealed that there is a negative psychosocial outcome and adults were reported with higher depressive levels<sup>[3]</sup>. Survivors of the pandemic experiencing fear of death and also social stigma as well as discrimination. Violence in the majority of the cases was reported against the survivors. Survivors experiencing anxiety disorder. Isolation of individuals exposed to viruses enhanced the risk for psychosocial problems. Majority of the survivors are experiencing distress reactions and diagnosable mental health issues. Loss of trust and disturbed cultural life were additional impacts on Indian

community. Survivors and careers lost trust in health services. The factors like sudden reduction in income, decline in travelling and work restrictions with loss of contact between friends and community members leads to anxiety disorders<sup>[4]</sup>. Due to the fear of infection, there is decreased interaction with the affected area people. Blame over one family in the community created distress among the individuals. There is a large scale evidence of distress and there is a need for psychiatric support during the outbreak of pandemic. Varying degree of vulnerability is reported in different age and gender. There is a confusion as well as limited access to health care services. Health care workers were at risk of experiencing distress and it is imperative to understand frameworks for conceptualizing the same<sup>[5]</sup>. The objective of the current study is to describe the impact of the COVID-19 pandemic outbreak on mental health and wellbeing of adults in Indian context.

#### **Mental health issues and COVID-19 Pandemic:**

The initial mental health effects of COVID-19 was emerged from China as people in Indian context repeatedly observing the report and television live streaming news from other countries, how people suffered in various countries, made people in India to have emotional distress and those with pre-existing mental health issues were at increased risk. When other countries were in lockdown and in a containment zone, no case of COVID-19 was reported in India. But after a month, cases started to escalate in India. Majority of the commonly documented impacts include stress, anxiety, worry and depression. Health care workers were on the first line of defense and they were exposed and found to be at higher risk for contracting the virus transmission and thus they developed the symptom of mental illness. In India, the first case was documented in January 2020; it initiated the sense of fear and distress as well as panic in Indian community. Indian government had a sequence of actions to control the viral spread. But the government failed to provide adequate information about the lockdown commencement and there are no warning signs and protection measures as well as people were not informed about the importance of lockdown that resulted in serious psycho-social distress. For basic needs like medicine and groceries, adults and elderly people used to stand in queues under the hot sun. But people below the poverty line in India, as they rely on their daily wages, don't have provisions to fulfil their basic needs<sup>[6,7]</sup>.

Unfortunately, the government's long and strict lockdown measures were violated by people in Indian context and majority of them wander in streets to fulfil their basic needs. This strict lockdown without warning has created serious psycho-social distress. Social distancing, lockdown and self-isolation and the subsequent lockdown without announcement were an experiential reality in India and that signal onset of a psychosocial crisis. Everybody experiences a certain level of distress but the vulnerable population in society experiences adverse impact in the emergency as they face disadvantages from their social location. They experience great distress as they fail to get their daily medication supply. People in rural India experience trouble in communicating with their family in towns and cities. They experience greater distress worrying about their family member's health and wellbeing. The COVID-19 pandemic too posed adverse psychosocial impact for those in quarantine and the fear of death and suicidal tendencies were immense for those on quarantine. Health care workers experienced symptoms of stress and depression as they were forced to work continuously without any break and they were not allowed to return to their family members as they were exposed to carriers of COVID-19. Self-isolation and self-quarantine troubled the health care workers physically and mentally<sup>[8]</sup>.

About lockdown and pandemic outbreak news media had created a huge threat and abundant fake acknowledgement. That created negative psychosocial effects and on subsequent lockdown the information acknowledged by news media is not transitory, but it created a long term impact on individual's health and wellbeing. Subsequent containment strategies eliminated face to face services. Remote services that were technically assisted were used during the pandemic but those services were out of reach for those in rural and remote villages in Indian context<sup>[9]</sup>.

#### **Alcoholism in the time of coronavirus:**

As compared to other countries, Indian context cultural norms were against alcohol and tobacco consumption. Majority of people in India consume alcohol in moderation and there is a perfect correlation between alcohol use and dependency in the community. However the moderation the level is, alcohol consumption will enhance the addiction symptoms and it is identified in a majority of cases. For adults using alcohol hazardously and those who consume it on daily basis with heavy

dose experiences difficulty in reduction of their doses and cessation of alcohol is beyond their level of imagination. During the pandemic outbreak and at the time of complete strict lockdown announcement, our Indian government completely shut the wine shops and people who consume alcohol on daily basis experiences AWS- alcohol withdrawal symptoms. Majority of them experienced the symptoms ranging from restlessness, tremor as well as sleeplessness. Alcoholics experienced insomnia (sleeplessness) for couple of weeks and that results with psychosocial distress. With families they need supportive care, but majority of the family members failed to understand the needs of the alcohol consumers and the reports of suicidal risk were there. Government failed to understand the needs of the alcohol consumers and the lockdown announcement enhanced complicated AWS like seizures and delirium. During the time of crisis, adults started to abuse alcohol and started to get involved with home preparation of alcohol. It has been reported that psychological perspectives of alcoholics were like "anyway am going to die in pandemic, so I got drunk for a week. As the AWS enhanced, Indian government reopened alcohol shops with limit slot allotted for elderly and adults, during that time everybody stocked up alcohol and the psychological perspectives of adults were there was no way forward to escape from coronavirus and without any regrets they wanted to consume alcohol<sup>[10]</sup>. There was a complex interplay of difficulty in managing finance, social isolation and worrying about the future as well as disturbance in daily routine contributed to enhanced alcoholic intake. Majority of them were found to have relapse during lockdown. As there is no face to face contact services available during pandemic there are further liver associated complications as the result of late presentation to service delivery health care settings. As the lockdown is a complex phenomenon, where each individual developed different behavioural responses. Employment loss, fear of contracting the virus and restrictions imposed by the government on social interaction were the real challenge for people. Persistent stress experienced during lockdown lead to the onset and maintenance of alcohol abuse. Alcoholics used alcohol consumption to manage the anxiety associated with the uncertainty about the duration of lockdown. Persistent alcohol overdose during lockdown is strongly associated with domestic violence with the partner and it is also associated with reduced immunity to coronavirus

infection and simultaneously increases the risk of liver diseases [11,12].

### **Challenges faced in maintaining personal hygiene and sanitation for people in Indian context:**

Route of transmission of COVID-19 is either respiratory or through contact. The droplets generated from the infected person when they cough or sneeze. These droplets remain active and at the virulent stage on environmental surfaces and the immediate contact with the environmental surfaces can aid in the source of virus spread and contact transmission. Hand hygiene, use of personal protective equipment like masks, gloves, face shield were not familiar to people in Indian context. After the lockdown commenced, the government of India insisted on following the hand hygiene measures to reduce the transmission of COVID-19 and they insisted on washing hands with alcohol based disinfectant hand wash with water. Alcohol based products were on demand and instructions were delivered on hand washing techniques and it was made mandatory to wash hands for 40 to 60 s with soap and water. Sudden outbreak of the pandemic has created scarcity for sanitizers and hand wash. Thus people were left with anxiety disorders and few may practice hand washing multiple times a day and in subsequent days that have turned obsession for the majority of them. Wearing surgical masks has created a complex situation during the pandemic. There was limited stock left with the manufacturers and people from rural villages in India, were not aware of the use of masks and hand washing techniques. Even when they were supplied with adequate masks and alcohol based sanitizers, they failed to use them properly. Reversal of mask, no proper disposal of mask, washing and disinfecting the reusable mask were the issues documented with the Indian adults. Majority were started to prepare their own mask in house and they used some herbal leaves of their choice and kept them close inside the cloth and started selling the herbal masks [10]. Failure to select the efficient mask that protects one against COVID-19 further enhances the risk. During the initial pandemic spread, people were confused whether to use surgical masks or cloth masks. Further information from media and television insisted on using the N-95 mask. Majority of people were not having money for food and accommodation during the virus spread and they failed to buy a mask and any other personal protective equipment. Herbal mask and homemade mask with sanitizers were used by resource

poor areas. People in resource poor area and in rural villages started using turmeric water for hand washing and used salt water to disinfect the floor and it is notable to document and consider that 2/3 of Indian population were from villages and the migrant workers further enhances the risk for COVID-19 transmission to villages and even without the resources they attained a state of anxiety and depression. Even without adequate reliable information on the COVID-19 spread and transmission, people in rural villages were forced to attain a state of isolation and they considered people in urban places were COVID-19 transmitters and started to engage in violence against the migrant workers and others who shifted to rural villages. Pandemic has superadded the inability to timely access the psychiatric services; all give rise to the peritraumatic psychological distress [13,14].

### **Domestic violence:**

During these Pandemics more than the difficulties of dealing with consequences of infection, the real difficulty lies with the measures taken to control the spread of infection like quarantines, social isolation, distancing and lockdown. COVID-19 has a significant impact on every individual in the country. Superadded effects of pandemic include loss of employment; loss of finances along with life security had significant impact on the mental health and relationship. Since there is a strict lockdown there are curbs to the movement of the individuals and people who were engaged in abusive relationships face the highest difficulty as they are stuck with the confined spaces with their perpetrator and they experience difficulty in communicating as well as getting timely help from others in the community. During the time of COVID-19 pandemic, there are reported rate of increased violence against women and children. Even after the pandemic ends, this crisis continues and it probably ends with causing secondary trauma. As people are stuck in the closed confined spaces within their family members, violence is likely to be increased during the lockdown. There are innumerable conflicts between the family members. Between the perpetrators there are issues related to substance abuse and violence. There are no possibilities left out to go out and seek help from others in the community. Domestic violence differs in the form like physical, sexual, emotional and among those physical violence takes the highest part. Psychological violence in the form of not allowing others to use telephones and mobiles overtakes

among the families. Humiliating, threats of harm overtakes emotional violence [15,16]. As the family member's experiences subsequent lockdown, there is enhanced physical violence in the form of hitting; slapping, kicking and the majority of them used weapons to indulge in physical violence. The result of domestic violence is psychological distress in the form of secondary trauma. Sexual violence includes non-consented sexual intercourse and unwanted pregnancy as well as sexually transmitted diseases was enhanced [11]. Even violence against older adults, children and pets were reported. The behavioural response of COVID-19 pandemic is multifactorial and it depends on interpersonal state. The tremendous enhancement in the feeling of functional impairment, boredom, stigma and phobia was observed. Unlike other virus spread, COVID-19 is unique in the way it spreads within the environment. The harsh restrictive measures created fear and uncertainty. Fear is an essential mechanism that humans use to cope with the threats in the environment. In the pandemic, fear was elicited in a conjuncture where the fear is not only about death but also includes organizing the family, school closure, social isolation and consequences in economics. Another kind of detrimental fear category is the stigma and discrimination exhibited towards those infected and also towards individuals exhibiting symptoms of COVID-19. Persistent fear has destructive outcomes at the end and the most common outcome of the fear is death. Among the family members, there is a fear of being infected, fear of infecting others, fear of being quarantined results in mental health impacts. Stressors like exposure to virus, loss of loved one, unavailability of food results in psychosocial impacts. For the majority of adults there is disruption of future plans [17,18].

#### **Changes in Daily Habits:**

After the pandemic outbreak there is a huge rise in sleep disturbances and this is associated with anxiety, depression and suicidal tendency. Diminished sleep quality, further enhances the quality of work and other activities of daily living and finally it enhances short temperament. Family cohabitation is spoiled as consequences of short temperament. People during the lockdown spent much more time before the television system and another fascinating inquiry was in news monitoring. Researchers have concluded that Indian adults spend greater than 5 hours on news monitoring revealing the death rate and incidence of COVID-19

affected cases and spikes of cases in districts. This result in fear towards the death of their loved ones and ultimately people develop anxiety symptoms. However in news podcasts the government of India announced the values and importance of social responsibilities during the pandemic and the importance of social distancing. But there is less involvement in risk prevention among adults. Majority of the adults in villages were not aware of the importance of social distancing and they violated the rules and regulations implemented by the government. Survey on Indian adults evaluated the changes in eating habits and lifestyle modification. It was established that as people stayed at home and due to lockdown, they had increased appetite and women reported that they spend greater hours in doing household chores like cooking repeatedly and cleaning vessels. Half of the adults perceived weight gain during the pandemic. Those who engaged in regular physical activity stopped their routine as there is closure of gyms and recreational centres [19,20].

#### **CONCLUSION:**

Individual differences in handling psychological distress and stress mediated contexts were prominent during the pandemic. Results of the analysis of individual response shows that people were anxious and they were expected to suffer the emotional impact secondary to the pandemic. Insecurity and avoidance of attachment were the risk factors for the psychological burden. Individuals who have been exposed to COVID-19 Virus had experienced innumerable psychological distress as they were avoided by their own family members. It was observed that those who contacted COVID-19 infection show higher prevalence of depressed mood, anxiety and somatic pain symptoms. Post-traumatic stress disorder is found to affect 98 % of patients in hospital with COVID-19. Having an infected person in the family is associated with a higher level of anxiety problem in Indian context. There is anxiety, depression, PTSD, alcohol misuse, obsessive-compulsive behaviors, panic and paranoia is predominant still.

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#### **REFERENCES:**

1. Roy D, Tripathy S, Kar SK, Sharma N, Verma SK, Kaushal V. Study of knowledge, attitude, anxiety and perceived mental healthcare need in Indian

- population during COVID-19 pandemic. *Asian J Psychiatr*, 2020; 3(1): 51: 102083.
2. Krishnamoorthy Y, Nagarajan R, Saya GK, Menon V. Prevalence of psychological morbidities among general population, healthcare workers and COVID-19 patients amidst the COVID-19 pandemic: A systematic review and meta-analysis. *Psychiatr Res*, 2020; 2(3): 293: 113382.
  3. Nursalam N, Sukartini T, Priyantini D, Mafula D, Efendi F. Risk factors for psychological impact and social stigma among people facing COVID-19: A systematic review. *Syst Rev Pharm*, 2020; 3(2): 11: 1022-1028.
  4. Gupta R, Grover S, Basu A, Krishnan V, Tripathi A, Subramanyam A, *et al.* Changes in sleep pattern and sleep quality during COVID-19 lockdown. *Indian J Psychiatr*, 2020; 2(3): 62: 370-378.
  5. Sun Y, Bao Y, Lu L. Addressing mental health care for the bereaved during the COVID-19 pandemic. *Psychiatry Clin Neurosci*, 2020; 74: 406-407.
  6. Goyal K, Chauhan P, Chhikara K, Gupta P, Singh MP. Fear of COVID 2019: First suicidal case in India. *Asian J Psychiatr*, 2020; 2(1): 49: 101989.
  7. Maunder R, Hunter J, Vincent L, Bennett J, Peladeau N, Leszcz M, *et al.* The immediate psychological and occupational impact of the 2003 SARS outbreak in a teaching hospital. *CMAJ*, 2003; 168: 1245-1251.
  8. Kar SK, Arafat SMY, Sharma P, Dixit A, Marthoenis M, Kabir R. COVID-19 pandemic and addiction: Current problems and future concerns. *Asian J Psychiatr*, 2020; 3(1): 51: 102064.
  9. Arabi YM, Murthy S, Webb S. COVID-19: A novel coronavirus and a novel challenge for critical care. *Intensive Care Med*, 2020; 46: 833-836.
  10. Grover S, Mehra A, Sahoo S, Avasthi A, Tripathi A, D'Souza A, *et al.* State of mental health services in various training centers in India during the lockdown and COVID-19 pandemic. *Indian J Psychiatr*, 2020; 2(4): 62: 363-369.
  11. Pareek M, Bangash MN, Pareek N, Pan D, Sze S, Minhas JS, *et al.* Ethnicity and COVID-19: An urgent public health research priority. *Lancet*, 2020; 395: 1421-1422.
  12. Kawohl W, Nordt C. COVID-19, unemployment, and suicide. *Lancet Psychiatry*, 2020; 7: 389-390.
  13. Kumar PR, Vishali M, Rao AS. Design and Characterization of Selegiline BioNanoparticles as novel drug carriers for Parkinson's therapy. *J Pharm Adv Res*, 2021; 4(5): 1251-1260.
  14. Saikia D. India's struggle with manpower shortages in the primary healthcare sector. *Curr Sci*, 2018; 4(4):115:1033-1034.
  15. Mohindra R, Ravika R, Suri V, Bhalla A, Singh SM. Issues relevant to mental health promotion in frontline health care providers managing quarantined/isolated COVID-19 patients. *Asian J Psychiatr*, 2020; 5(1): 51:102084.
  16. Bhat R, Singh VK, Naik N, Kamath CR, Mulimani P, Kulkarni N. COVID 2019 outbreak: The disappointment in Indian teachers. *Asian J Psychiatr*, 2020; 2(1): 50: 102047.
  17. Namdeo P. A Review on Herbal Immunity Booster and Nutrition – To Fight against COVID-19. *J Pharm Adv Res*, 2021; 4(5): 1226-1237.
  18. Xiao Y, Torok ME. Taking the right measures to control COVID-19. *Lancet Infect Dis*, 2020; 20: 523-524.
  19. Dalal P K, Roy D, Choudhary P, Kar SK, Tripathi A. Emerging mental health issues during the COVID-19 pandemic: An Indian perspective. *Indian J Psychiatry*, 2020; 62(3): 354-364.
  20. Li Z, Ge J, Yang M, Feng J, Qiao M, Jiang R, *et al.* Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control. *Brain Behav Immun*, 2020; 88: 916-919.

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