



IJPPR

INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals

ISSN 2349-7203



Human Journals

Review Article

June 2021 Vol.:21, Issue:3

© All rights are reserved by Pournami Mohan et al.

The Global Fire of Corona Virus and Its Impact on Mental Health



IJPPR
INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals

ISSN 2349-7203



Pournami Mohan *, Subodh S Satheesh

1. *Pharm D Student*, Sreekrishna College of Pharmacy and Research Centre, India.*

2. *Assistant professor, Sreekrishna College of Pharmacy and Research Centre, India.*

Submitted: 22 May 2021
Accepted: 29 May 2021
Published: 30 June 2021

Keywords: corona virus, epidemiology, psychology, quarantine, strategies, Lockdown

ABSTRACT

Due to rapid progression of coronavirus disease 2019 pandemic, the whole world is currently witnessing a dramatic disruption of livelihood. To avert pandemic related mortality, there is an urgent need to better understand its epidemiology, characterize its potential impact and identify mitigatory strategies. Increasing cases and death of covid 19 have led to worldwide lockdown quarantine and some restrictions. To prevent covid 19 infection from spreading even further, modern lockdown strategies have been enforced all over the world. The government thought that the application of lockdown can be effective on psychology, environment and economy besides having an impact on covid 19. Quarantine helps in decreasing the spread of corona but it may also cause negative impacts on the mental health of people. In this article, we widely discuss the impacts of covid on different categories of people. These strategies were forced to be followed initially due to the absence of a vaccine and no proper pharmaceutical treatment. The collapse of the health system must be prevented and the intensity peak of epidemic curve must be reduced. As an effect of lockdown, certain impacts on children, adults and geriatrics population affects their mindset and making them mentally unwell.

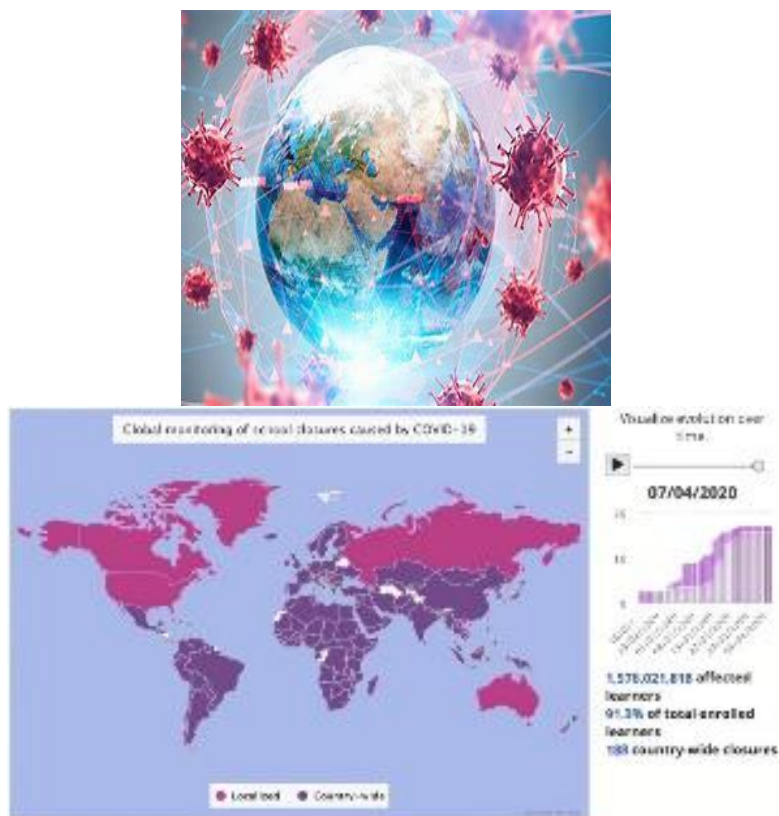


HUMAN JOURNALS

www.ijppr.humanjournals.com

INTRODUCTION

In December 2019, in Wuhan city, Hubei Province in China, a disease that is similar to pneumonia cases began to emerge. The virus source was thought to come from the Huanan seafood market in Wuhan, China. Usually through droplet scattering, respiratory diseases are spread. In transmission of this virus, environmental factors play an important role. The virus is the so-called **Severe Acute Respiratory Syndrome Coronavirus 2[SARS-COV-2]**. This name was adopted by international committee on taxonomy of viruses on 11 Feb 2020. Transmission of SARS-CoV-2 from human to human was confirmed on 20th Jan 2020. The median incubation period for covid is 5.1 days and it can be up to 14 days. Across the world, an unhealthy situation is developed due to severe contagious nature of Covid 19.[1]



[Figure No. 1: Spread of corona across globe]

Avoiding virus exposure is an easy way to decrease SARS CoV-2 infection rates. People should avoid traveling to countries highly affected by the virus, and avoid consuming food that is not home-cooked.

Avoid direct contact with the infected person and necessary preventive measures such as wearing a mask and regular hand washing should also be practiced. Those people who

travelled from other countries and China and exhibited symptoms including fever, difficulty in breathing, sore throat, cough and were asked to visit the nearest hospital for a health checkup. Humans do not have immunity to this virus allowing its easy and rapid spread among human population. To reduce the fall of people, system of lockdown was implemented in various countries. The government asked people to remain at home for safety and only necessary movements was allowed. Schools, offices, playgrounds and mall and all other public and private sectors was closed. The required sectors were opened but only for a limited period strictly following covid protocols.[12]

Beyond all the above strategies, they also have negative impacts on public mental health. The common problems faced by the people during lockdown was depression, stress, fear and anxiety. Stress is said to be an event that threatens our homeostasis and may cause feeling of emotional and physical tension. When there is disinterest in daily activities, it is said to be depression state.



[Figure No. 2: Depression during Covid 19- lockdown]

Around the globe during this pandemic, concerns regarding psychological distress must be kept in mind. When compared with other professionals, health professionals would be more distressed. Those people along with their family with all daily needs may not be distressed when compared to someone who does not have the same. The attention of world was attracted and disturbed by plight of migrants. How anxious the people are in times of this pandemic can be understood by emptying supermarkets and panic buying. Even students are experiencing distress due to uncertainty of examinations in school and colleges. Every children are not able to afford net connection for online classes and impact of online teaching is not optimum. Hampered academic activities, daily life events and poor economic

conditions are anxiety issues among students during covid 19. An effective mental health arrangement can be planned by practitioners and policy makers.[2]

IMPACT OF COVID 19 ON CHILDREN



[Figure No. 3: Covid 19 impact on children]

Emotional and social development in young children and adolescents shows greater impact. During one of the preliminary studies, it was found that younger children [3-6 yrs. old] were more likely to manifest symptoms of clinginess and fear of family members being infected than older children. Inattention to severe psychological conditions of increased irritability, and clinging behavior was revealed by all children irrespective of their age groups.

The Common problems experienced by children was disturbed sleep, nightmares, poor appetite, agitation, lack of attention. 91 percent of the world's population was negatively impacted due to nationwide closures of schools and colleges. Lack of opportunities for socialization disruption in education as well as physical activities due to uncertainty and anxiety that is associated with home confinement of children and adolescents. Absence of structural setting of school for a long duration, results in disruption in routine, boredom and lack of innovative ideas for engaging in various academic and extracurricular activities. Children might refuse to go back to school after staying so long in home and will have a long term negative effect on their overall psychological wellbeing.

Some children will be anxious about their future due to examinations being postponed or cancelled as a result of the pandemic. These may cause some issues that may delay further education. There are various harmful substances for the children in social media to which they get addicted. Cyberbullying and inappropriate contents are common in internet. Child exploitation is also at an increased risk. In poor areas of the world due to job losses and greater economic insecurity leads to particular problems like child labour, domestic violence, early child marriages and sexual exploitation.



[Figure No. 4: Over dependence of social media]

Children can be made useful in knowing the value of nature and inform them about the reduction in overall pollution due to less traffic. Develop relationships, empathy and humanity by making them realize the value of human life.[3]

IMPACT OF COVID 19 ON CHILDREN WITH SPECIAL NEEDS.

There will be some children with neurodevelopmental disorders, behavioural and emotionally difficult children within the age groups of 2-8 years. During the current pandemic and lockdown, these children may encounter challenges. Due to the enforced restrictions and unfriendly environment, they have intolerance for uncertainty and there is aggravation in symptoms. Such children may experience difficulty in understanding instructions like complexity of the pandemic situations and doing work independently. Due to closure of special schools and day care centres, children may lack access to resource material, peer group interactions and learning opportunities. This may lead to regression to past behavior as they lose anchor in life as a result of their symptoms could relapse.

It is very difficult for children with autism to adapt the changing environment. Parents faces huge challenges to handle autistic children. Every child has different needs to be met since every disorder is different. Since these children cannot undergo online sessions and when confined to one place and not to touch things, which may infect them and their hyperactivity increases along with heightened impulses.



[Figure No. 5: Autistic children during Covid 19]

They need support in each and everything. Situation around them can be thought with the help of stories, pictures and visuals. Autistic kids may feel frustrated, worried or scared may have repetitive behaviours, tantrum and other challenging behaviors. Calming activities such as deep breathing, music or watching a favorite video throughout the day and talking together, doing crafts, writing, playing and acting out fears. Make sure that we take breaks and recharge too. [9]

IMPACT OF COVID 19 ON UNDERPRIVILEGED CHILDREN



[Figure No. 6: Children doing household works]

Security and safety are a source that represent home. But for the poor and underprivileged restriction of movement due to lockdown, these children have increased risk of being exploited. The Deputy director of childline 1098, India has announced that they have seen an increase in the calls since lockdown began on helpline for children. This has led to an increasing number of child victims in their own homes. This can cause child more vulnerable to suicide, anxiety and depression.

The most vulnerable during the lockdown are the street children. Child protection system and several basic services for children such as growth monitoring, supplementary nutritions, immunization, sexual and reproductive health services was disrupted. Child marriages of girls have also led to an increase, due to increase in household level, coupled with closures of the schools.

Different childcare committees were formed during lockdown to take special care of the children in the remote areas. They have set up computer labs with internet connection and electricity back up. Also reaching out to families to create awareness on the importance of education and self study time for the children. The child care committees have also guided on scheduling online classes, technology uses and online applications and portals for education. They have also created a folder for each child with all their report cards, educational goals and career plans to keep the kids engaged with brain storming sessions such as quiz competitions, spelling tests, mathematical calculation, taboo words and many more activities are being done.[5]

IMPACT OF COVID 19 ON ADOLESCENTS

Parents are the best role models to the children and home is the best place to learn life skills practically. These opportunities can be used to communicate more openly with children by parents. Increased risk in adolescents during covid 19 is due to:

- Increased dropout
- Increased gender gap in education
- Stress and other mental health disorders
- Dependence or addiction
- Poor menstrual hygiene
- Increase in exposure to violence
- Early age of initiating smoking, alcohol or drugs.



[Figure No. 7: State of stress]

By the middle of lockdown, schools and colleges have planned to initiate online classes through video app. Online ventures, YouTube channels were started by various youngsters and most of them were busy in social media. Most of them forget to interact with family members and they have created a web world around them.[4]

These opportunities can be used to communicate more openly with children by parents. This situation can be utilized by older children to learn responsibility, accountability and collaboration. Excessive internet use must be avoided, random search on covid related topics must be stopped as it results in anxiety. Time-hunt must be set up for using or surfing net. Parents must encourage adolescents who are introverts to communicate their feelings and common problems they face.

IMPACT OF COVID 19 ON PREGNANT WOMEN

Pregnant women experience increased stress level during this pandemic situation. Increased stress may cause signs and symptoms like changes in appetite, frequent feelings of fear and worry about pregnancy and delivery, poor sleep, less concentration. Overall risk of Covid 19 to pregnant women is low. Pregnant women with covid 19 may experience respiratory symptoms which require intensive care.



[Figure No. 8: A women after delivery during covid 19]

Pregnant women should take precautions to avoid Covid 19 infection such as by washing hands frequently, avoiding crowded places and keeping space between ourselves and others, respiratory hygiene must be practiced.

According to local policies and following adapted measures to reduce possible transmission of the virus. Pregnant women and women who have recently delivered should attend their routine care appointments. Those pregnant women who are suspected to have infection must be treated with respect and dignity, clear communication by maternity staff, appropriate pain relief strategies. It is not compulsory to do cesarean for suspected or covid confirmed cases in women. The mode of birth should be individualized and based on a women's preferences alongside obstetric indications.[10]

IMPACT OF COVID 19 IN GERIATRICS

Elderly people are more vulnerable to covid exposure as countries are affected by corona disease. Elderly population will be asked to self isolate for a very long time and this attempt is done to shield or protect them from over-burdened health systems. There is greater risk of depression and anxiety due to social disconnection of elderly people. Elderly people will not be used to online technologies and their world was with their family and outside world such as day care venues, community centres and places of worship. Those who are already lonely, isolated or scheduled was placed at additional risk as they cannot rely on the support of voluntary services or social care. Immune systems will be weak, in elderly people and if covid is present, it may cause heightened risk of cardiovascular, autoimmune, neurocognitive and mental health problems.



[Figure No. 9: Old women discharged after Covid 19 treatment]

In elderly, mental health is cornerstone of public health. The important components of mental health in elderly can be done by regular telephone counselling sessions, healthy contact with family, relevant and updated information, caring for general medical and psychological needs and respecting their personnel space and dignity. Especially for vulnerable old aged population, warrants sensitization at all levels for early detection of mental health care need and plan appropriate interventions.[11]

IMPACT OF COVID 19 IN HEALTH WORKERS

Health care workers [HCW] face several challenges treating patients with covid 19 at the heart of unparalleled crises of corona. They were asked to stay extra hours during this pandemic and have to look after the corona patients who are visiting the hospital. HCW will be more prone to show anxiety, depression and fear due to exposure with infected persons. They have to stay away from their loved ones and maintain covid protocol until the given time period is over. During outbreak, HCW experience immense stress. There is high chance for turnover rates, lower productivity, lack of empathy in treating patients, medical errors when health care workers experience emotional exhaustion.

Electronic health record duties, insurance and billing issues, dissatisfaction of patients and balancing busy work life schedules are some of the multifactorial nature of stressors in healthcare before covid 19. So appropriate psychological support, interventions and staff support measures must be initiated.[8]



[Figure No. 10: Stress on health care workers]

Motivational sessions, leisure activities such as yoga, meditation and exercise, providing a place to rest and sleep, providing adequate breaks and tune offs, online platform for medical assistance, establishment of shift in hospital, availability for help, psychological counselling are some of important interventions for medical staff during this pandemic. The disease will subside eventually a new surge of patients suffering from psychological morbidity will emerge if timely measures are not taken.[7]

IMPACT OF COVID 19 ON POLICE SERVICE

Police were considered to be first responders to covid 19 and they can be named as ‘corona warriors’ along with health care professionals. They are trained in dealing with both natural and manmade disasters. Apart from regular work profile, the covid 19 pandemic requires many police personnel to assume responsibility for emergency. Police force was in charge of implementing the lockdown by restricting public movement and ensuring physical distancing. Police personnel were mobilized for a variety of tasks to monitor checkpoints, monitor covid 19 infection hotspot and ensure lockdown as well as containment. They also carry out some other variety of unconventional duties like clarifying fake news, creating social awareness, assisting the health department in contact tracing activities, helping migrant workers to enter shelters, daily inspection of people in isolation or quarantine and helping the needy people to access medical and other essential services.

Among police personnel due to exposure to covid 19 risk such as increased inappropriate use of personnel protective gear like mask and gloves substantially and lack of awareness and specific knowledge of covid 19 prevention. Compared to general population, police personnel are 8.78 times more likely to get affected by covid 19. They have made risk mitigation plans

like modifications in their human resource allotment and use of technology in the services that reduce risk of transmission of covid 19.

IMPACT OF QUARANTINE ON PEOPLE

The two measures that can prevent or at least minimize the impact of infectious disease outbreaks are quarantine and isolation. The persons who are exposed to infection undergo quarantine and isolation is said to be the separation of known persons with infection. Change in lifestyle and nutritional habits are main consequences of quarantine. Those who undergo quarantine, it is often an unpleasant experience. Uncertainty over disease status, loss of freedom, separation from loved ones, create dramatic effects. When being alone for a whole week may cause bore as well as negative thinking, will be increased. Post-traumatic stress symptoms confusion and anger are said to be the negative psychological effects of quarantine. Many participants continued to engage in avoidance behavior after quarantine. After release from quarantine having a history of psychiatric illness was associated with experiencing anxiety and anger.

For some persons being unable to get regular medical care and prescriptions also appeared to be a problem. Participants are fearing the worst due to lack of clarity about the different levels of risk. Stress driven eaters would switch from a healthy diet to unhealthy diet during quarantine. In high risk patients cardiovascular risk is severe. Those who lost earnings while in quarantine must require additional level of support. After sometime, government allowed the infected person to remain in their residence in a separate space from their family. Only serious cases were admitted in the hospitals. Those who undergo quarantine at home must inform the government and nearby health centres. Random inspection from both sectors will be present. The persons under quarantine must strictly follow the covid protocols. After completing the required period, antigen test or RT-PCR test must be taken and final negative report must be submitted to respected persons.[6]

MEASURES TO PREVENT THE COVID IMPACTS ON MENTAL HEALTH

1.CREATE A STRUCTURE

- Watching, reading and listening to news about covid must be limited.
- Once or twice a day, your information on the corona virus outbreak from a trusted source such as CDC or WHO.

-Feeling of uncertainty can lead to increased mental health symptoms.

II.MAINTAIN YOUR PHYSICAL HEALTH

-Good quality and sufficient sleep are required.

-Food must be taken at regular intervals.

-If you can't go to the gym, maintain an exercise routine. An online workout video can be used to do exercise at home.

III.TAKE CARE OF YOUR SPIRIT

-Relaxation technique, deep breathing, progressive muscle relaxation, meditation can be tried.

-For guided meditation exercises, youtube or phone apps such as calm or headspace can be used.

IV.CONTINUE OR SEEK OUT MENTAL HEALTH TREATMENT

-For telehealth, regulations have been temporarily relaxed to allow even non-medical softwares like skype, facetime and zoom.

-Avoid use of drugs and alcohol.

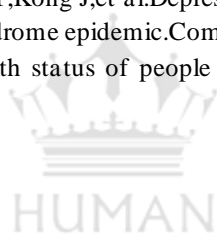
CONCLUSION



Mental health issues faced by the world in this hour of crises can be dealt with keeping a positive approach, effective communication strategies and understanding problem. Mitigating the hazardous effects of covid 19 on mental health is an international public health priority. In time of a raging pandemic, psychological distress are common for many people during quarantine, isolation and Social distance. Providing information is the key for simple and effective action. Emotions experiencing are normal reactions to difficult circumstances.[11]

Everyone is adjusting and accept that things are different now. Know that it is okay to let some things go right now and prioritize what's most important. This situation can be made useful by spending more time with family and try to stay positive. Things will return to normal and try to remember that this is normal. Based on stereotypes it's time to give up conventional thinking and from a mortal perspective and finally start the action. Our best bet is a happy future for all who live on earth, our common home.

REFERENCES

- 1.Dong L,Bovery J[2020],public mental helath crises during Covid 19 Pandemic china,emerging infectious diseases,26[7].
- 2.Brooks S K,Webster R K ,Smith L E,Woodland L,Wessely S,Greenberg N et al[2020].The psychological impact of quarantine and how to reduce it:rapid review of the evidence.Lancet,395[10227]:912 - 920.doi:10.1016/S0140-6736[20]30460-8
- 3.Dalton L,Rapa E,Stein A[2020].Protecting the psychological health of children through effective communication about covid 19.The lancet child and adolescent health.
- 4.Christie D,Viner R[2005].Adolescent development.British medical journak,330[7486]:301-304.
- 5.Yao H,Chen J H,Xu YF[2020].Patients with helath mental disorders in the covid 19 epidemic.The Lancet.Psychiatry;7[4],e21
- 6.Lancher W V ,Parolin Z.Covid 19,school closure and child poverty:a social crises in the making.Lancet public health.2020;5:e243-e244.
- 7.Viner R M,Russell S J,Croker H,et al.School closure and management practices during coronavirus outbreaks including covid 19:a rapid systematic review .Lancet child adolescent health .2020;4:397 -404
- 8.Van Tilburg T G,Steinmetz S,Stolte E, Van der Roest H,de Vries D H.Loneliness and mental health during the covid 19 pandemic.Published online august 5,2020.J Gerontol B Psychol sci soc sci.
- 9.Stogner J,Miller B L,McLean K .Police stress,mental health and resiliency during thecovid 19 pandemic.Am J Crim Justice.Epub ahead of print 2020.
- 10.Duan L,Zhu G,Psychological interventions for people affected by the covid 19 epidemic.Lancet Psychiatry 2020;7:300-2
- 11.Liu X,Kakade M,Fuller C J,Fan B,Fang Y,Kong J,et al.Depresion after exposure to stressful events : lessons learned from the severe acute respiratory syndrome epidemic.Compr psychiatry 2012;53:15-23
- 12.Jeong H,Yim H W,Song Y J,Mental health status of people isolated due to middle respiratory syndrome epidemic health 2019.



	<p>Author Name – Dr.SUBODH S SATHEESH</p> <p><i>Author Affiliation-BPHARM,MPHARM,PhD</i></p> <p><i>Author Address./Institute Address –SREE KRISHNA COLLEGE OF PHARMACY AND RESEARCH CENTRE,PARASSALA.</i></p>
	<p>Author Name-POURNAMI MOHAN</p> <p><i>Author Affiliation-4TH PHARMD STUDENT</i></p> <p><i>Author Address/Institute Address-SREE KRISHNA COLLEGE OF PHARMACY AND RESEARCH CENTRE, PARASSALA.</i></p>