

Impact on Mental Health during Covid-19 Pandemic: Online Survey

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Abstract

Background

The Covid 19 Pandemic is a major health problem affecting various nation with over 7,50,000 cases and over 50,000 confirmed deaths. Such type of widespread outbreak is responsible for causing psychological effects . Covid 19 brought the lives to a standstill and abrupt pause to daily functioning in normal public life. Due to Lockdown people stayed at home experienced more anxiety and frustrations.

Moreover, Aditya Birla Education Trust tools the initiative to address mental health care gaps in India. This trust joined hands with Brihan Mumbai Municipal Corporation (BMC) to look after the Indian Mental health problems.

There are many studies showing different groups of people showing different status of mental health. In general, it was estimated that 52% people having anxiety, 22% of them having isolation and adjustment issues, 11% about depression and 5% for sleep related issues.

Objective of the study

This study aims to assess the effects of Covid-19 pandemic on the mental health of general public .This research was done to highlight the urgent need to develop interventions and preventive strategies for the cure of mental disorders developed during pandemic

Methodology

We took a research to overview the mental conditions or psychological effects of general public, Health care workers, Advocates, teachers, students during Covid 19 pandemics and that too in Lockdown restrictions. We collected the important information regarding psychological impact of different Participants by online survey after preparing few Questionnaires and uploaded as Google form.

Result

There were 100 participants who took part in this research in which 49.4% were females and 50.6 % males. In this study 79.3 % lives in nuclear family. 7 people have poor mental condition and four having pre-existing mental disorder. 10 people complained of Increased risk of poor sleep quality during this pandemic and 26% participants were on antidepressants.

Conclusion

The general public faced many psychological problems like anxiety, worries and insomnia especially after the declaration of lockdown in India on 24th March, 2020. Timely healthcare is needed for preventing further increase in mental health problems and Counselling by Psychiatrists needed as urgent treatment.

Keywords: Covid 19, Anxiety, Stress, Pubic Health, Loneliness.

Introduction

The numerous pandemics in the past had also shown the presence of different psychological problems . Around 16% of the world population is suffering from mental disorders ¹. For example, suicide rates increased by 13% globally during the Global Financial Crisis. The outbreak of coronavirus disease 2019 started in Wuhan city, Hubei Province, in China in December 2019.² It was declared pandemic in January 2020 by WHO to be a Public Health Emergency of International Concern.³ This pandemic brought turmoil among public leading to stressful life for the people all around world. WHO and public health organisations said that in the wake of this pandemic it becomes important that every country has to take strict actions to contain this disease as the mode of transmission of this disease is by contact.

The most common factor for the degrading mental health in the Corona Virus pandemic is due to the nationwide 'lockdowns' which increases boredom. Approximately all Countries have done Lockdown either partial or complete, In India Janta curfew was observed on 22nd March followed by lockdown from 25th March 2020^{4,5,6,7}. The idea behind this was to contain the infection at the initial level and to prepare country for outbreak.

The extended lockdown and social distancing created psychological problems in Indians. The various measures introduced among countries to minimise the spread of covid-19 infection by restricting the movements, thus making huge changes to daily routine of common public. This boredom piles up results in unemployment, financial crisis, domestic violence, drug and alcohol abuse, suicides and others⁸.

Due to this Pandemic complete lockdown was ordered globally and accordingly, so the people had to follow new strategies like working from home, children started home schooling, many small factories and malls were temporarily closed leading to temporary unemployment, no contact with other relatives, friends and colleagues. So all these new changes took time to get used to. The fear about increasing number of fatalities and the fear of getting caught by the disease leads to ill mental health. As said by McKinsey Global Institute, "increasing infection across the world raised our anxiety and cases of personal loss, plug us into grief."

Due to the geometrically increasing unemployment rates and the economic downfall during this pandemic, people have lost hopes and are suffering with clinical depression as clearly explained by^{9,10}. A Fear and anxiety among public was overwhelming. They are imagining it as a prison and the condition are worst for the people who are in quarantine¹¹.

In a recent study from Wuhan, it was found that 54% of people had stress, 17% had the symptoms of clinical depression¹². These symptoms of anxiety and depression are common Psychological factors that leads to insomnia¹³. "Depression and anxiety would be precipitated in such vulnerable patients", said by Dr. Shyam Bhatt, Psychiatrist and Physician based in Bengaluru.¹²

The Corona Virus has either directly or indirectly affected multitudes of people in different forms; mental health has been one of the most prominent. Due to economic downfall, unemployment, movement restriction, public health had suffered a lot around the World especially mental health during this Covid-19 infection¹⁴. A recent article in the Journal of the American Medical Association highlighted the requirement of Hospital and Medical Clinics so that the concern regarding Covid 19 does not have a negative outcome on the medical care or affect it badly. A study from China suggesting that more than half of the participants had a significant psychological impact of the COVID-19 pandemic.¹⁵

One of the studies from Denmark reported the ill effects of this pandemic. American Psychiatric Association conducted the study and found 50%

people in United States were suffering from anxiety and depression study.¹⁶. The same has not been studied in Indian population systematically; except anecdotal discussions and case reports¹⁸. According to WHO (WHO 2020), "the common psychological problems are stress and anxiety", with a warning that new measures like quarantine and lockdown and its effects causing serious mental disorders affecting many people's usual activities.¹⁹

Impact on children

The lockdown and coronavirus had a deep and negative impact on children.²⁰ Their mental health has been affected adversely and psychologists point out the need for providing urgent help to them for good mental health of children during such tough times. Many psychologists and child therapist pointed out that thousands of children from across India are affected by the lockdown because of which they are not able to move out. Zoom calls and other online classes platforms are not helping everyone.

Regular report about Covid 19 on social media created a great panic in elders and children. Many children suffer from isolation and boredom. Many surveys were also conducted and they also pointed out the same situation in the present scenario. K Bhavani, a counsellor who works with an NGO says. "When children move away from their daily routine they are disturbed and feel lost very often. Loneliness worsen the situation. Children are affected globally especially due to the socio-economic impacts^{15,21}. This is a major crisis and for some children may adversely affect them even for lifelong, says a report by United Nations.

Impact on aged people

The aged people are more prone to virus due to their weak immune system and underlying medical conditions. They require personal assistance most of the time not just during a pandemic. Due to social isolation which is becoming a part of life now, research has shown that loneliness increases the risk of anxiety, depression and stress in aged people which causes psychological problems in behaviour, poor sleep quality and more inactiveness. Lockdown and Quarantine in this Pandemic increases the risks of Loneliness. IT'S REALLY IMPORTANT TO REMEMBER, EVEN DURING A CRISIS, TO MAKE TIME FOR OUR ELDERS." Said by Sarah Szanton Director, Center for Innovative Care in Aging

Impact on Frontline Workers

Workers of industries, healthcare, sanitation, police, security, retail are working to fight Covid 19. This may give them stress and trauma and intensify their psychological sufferings. These people are facing directly the threat of infection. Lack of equipment, supplies, funding and resources made them helpless. Depression, anxiety, insomnia and PTSD are some of the psychological impacts on their mental health. They are in danger of getting sick from the exposure of the virus. Many of the frontline workers worry about spreading the disease to the other patients or their families. Frontline workers were sharing their experiences to social media that how they are mistreated by their neighbours and manhandled by the patients. Experts predict that mental health of

these people will be affected for longer period even after the virus has gone. Medical professional are already at high risk for anxiety, depression, insomnia etc. They don't have time to visit a therapist and this gives rise to many psychological problems.^{22,23}

We should take extra care for our own mental health and help others also who need extra care and support during these circumstances.²⁴ Mental health care must be included in healthcare benefit package and insurance scheme to ensure essential mental health needs are covered. Various programs should be arranged to promote psycho social wellbeing, the outlined approaches include: development of mental health team by Government to provide mental health support to patients and health care workers, regular clinical screening of patients for depression, anxiety, and suicides²⁵.

Psychological counselling and providing mobile and internet support for communication in case of quarantine of affected patients and other new technologies²⁶ can be used to help general public in this pandemic²⁷. Helpline numbers have been issued by Government of India to provide guidance and counselling, in collaboration with different Institutes of national importance.²⁸ According to WHO necessary precaution should be taken to avoid these unusual mental health problems due to Covid 19 Pandemic.

Many research studies showed that COVID-19 patients having post-traumatic stress symptoms (PTSS). Studies also showed that psychological symptoms had been increased among health care workers with anxiety, psychological distress and poor sleep quality. The condition of the People having pre-existing mental disorders was deteriorated general public revealed lower presented with psychological symptoms like anxiety and depression.

Material and Methods

We took a research to overview the mental conditions or psychological effects of general public (with different Professions like Advocates, teachers etc), Health care workers, students during Covid 19 pandemics and that too in Lockdown restrictions . To collect the most relevant information about the psychological impact of different Participants we did

online survey by preparing few Questionnaires as Google form. Participants who had filled the form were included in the study. We noted the number of participants demographics (sex, age, employment (health-care/non-health care)), pre existing psychiatric symptoms, comorbidities present or not ,any risk factors/factors .

The link was provided for this google form, after clicking on the link first page would come that contains the personal information of the participants. If they consented to participate and filled the form they were taken to the next page of the survey. This contains study questionnaires collected socio-demographic information like age, gender, occupational status, type of family etc.

The second part of the survey contains questionnaire which could display their routine life stress, everyday traumas and acute stress and having any pre-existing medical or psychiatric illness. For few questions, scoring was done ranging from 1 to 10 that signify mild, moderate and severe psychological impact accordingly.

Following are the Questionnaires prepared and uploaded as Google form .

1. How would you rate your mental health?
2. Have you ever been diagnosed with mental disease?
3. Is there any family history of mental disease?
4. How is your quality of sleep?
5. Have you ever felt low for more than 2 weeks in the past 3 months?
6. Do you feel that life is meaningless?
7. Are you able to deal with your problems?
8. Do you feel tired after getting up in the morning?
9. Do you find it difficult to recall things?

Result

There were 100 participants who took part in this survey in which 49.4% were females and 50.6 % males respondents were aged from 16 yrs to 60 yrs as shown in Figure 1. Males had lesser psychological impact of COVID-19 outbreak as compared to the females as shown in Figure2. Among these 85 participants 80% were unmarried who took part in this research (Figure3).

Age

85 responses

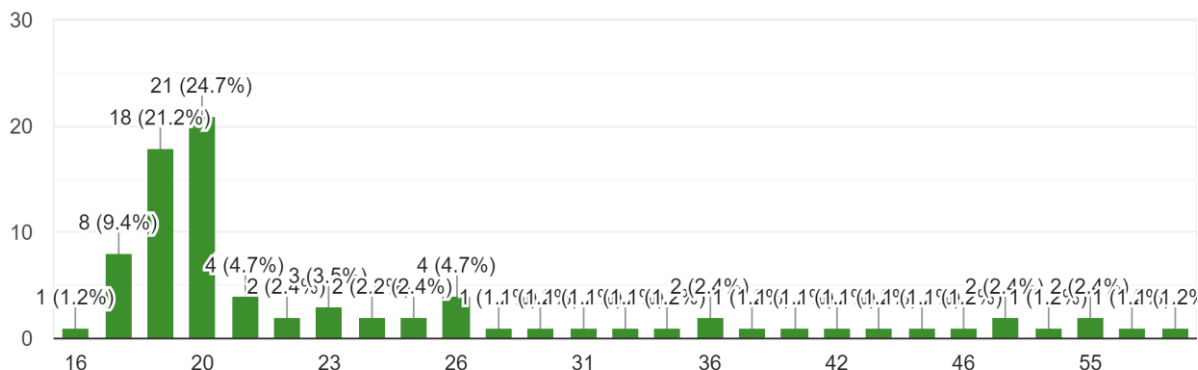


Figure 2 : Gender wise distribution

In this study 79.3 % lives in nuclear family, 11% having extended family and 9.8% are single.

Figure 4 : Type of family

Mental condition was more affected in people living singly and in nuclear family. Mental condition of 12 people was not satisfactory in our survey and they reported an acute stress disorder during this pandemic as shown in Figure 5 to Figure 8. Participants manifested irritability, insomnia, poorer concentration and performance, anxiety anger. Such people also had a fear of becoming infected if comes in contact with febrile patients or any other infected person and also fear of rejection by their neighbourhood or may face social stigma if comes positive. 05 of them having pre-existing mental disorder like depression, bipolar disorders and anxiety

too. All 05 were from nuclear family and unmarried , having family history of mental disorders also.

May be these factors would be responsible for their poor mental condition. They reported deterioration of their mental health due to this pandemic. psychological symptoms had been increased in people with pre-existing mental disorders. Out of 85 participants, 29 having average mental condition that means they felt anxiety , depression, stress many times but not always. Rest 44 of them reported normal mental condition, but some of them too reported occasional fear and anxiety. Feelings of anger were present in these patients.

How would you rate your mental health?

85 responses

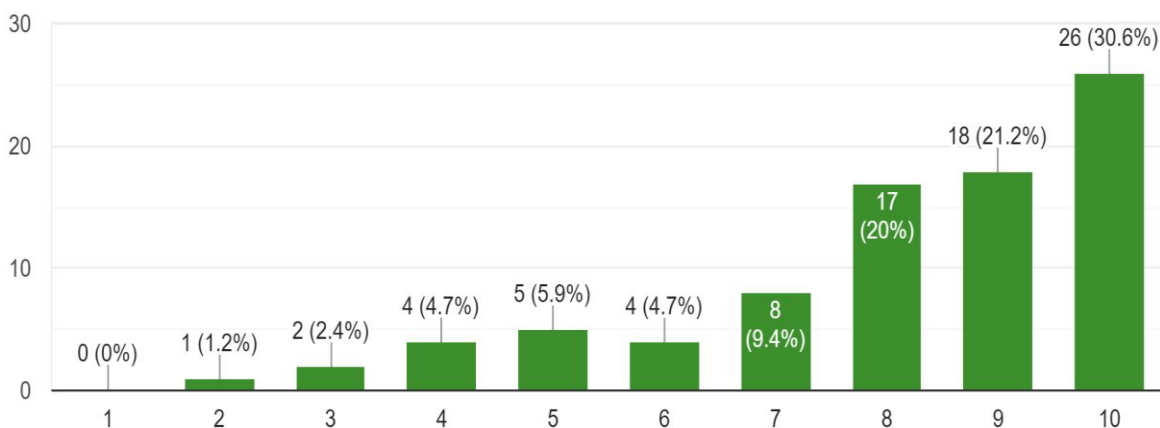


Figure 5: Grading of Mental Health

In this survey 10 people complained of poor sleep quality during this pandemic, 35 complained of

average quality sleep and 40 having good sleep.

How is your quality of sleep?

85 responses

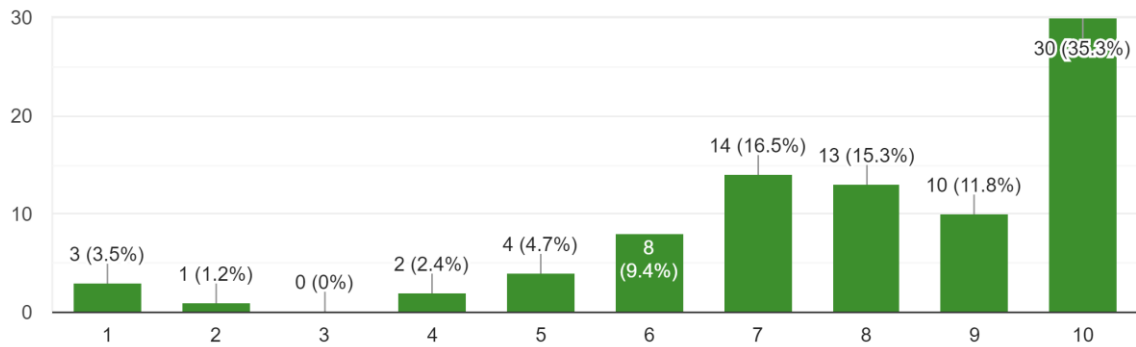


Figure 8 : grading of quality of sleep

In our study 26% participants felt low (uneasiness, tiredness, don't want to work) for more than two weeks in the past three months due to lockdown and pandemic.

Have you ever felt low for more than 2 weeks in the past 3 months?

85 responses

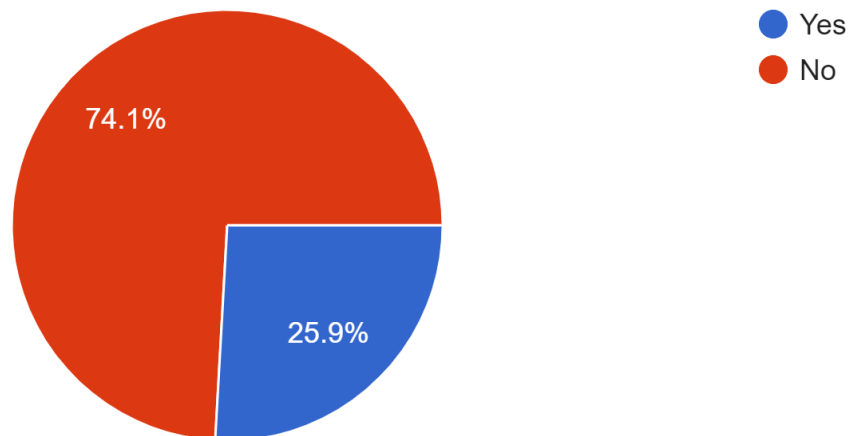


Figure 9 : participants showing uneasiness during lockdown

Among these, 7% considered their life as meaningless, they really need counselling. They were taking antidepressants. 40% sometimes considered their life was useless and meaningless but not always

and soon they recovered themselves by listening song, watching movies and other entertainment. So, they did not need counselling but they were taking antidepressants sometimes.

Do you feel that life is meaningless?

85 responses

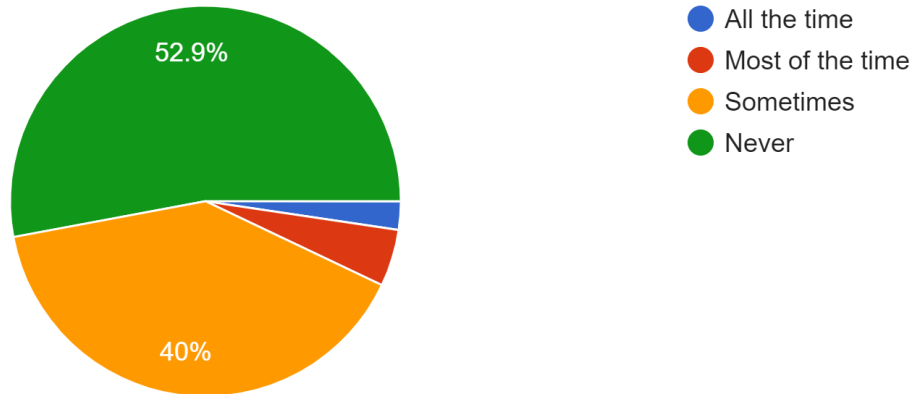


Figure 10 : Participants Expressing Life Useless and Meaningless

Are you able to deal with your problems?

85 responses

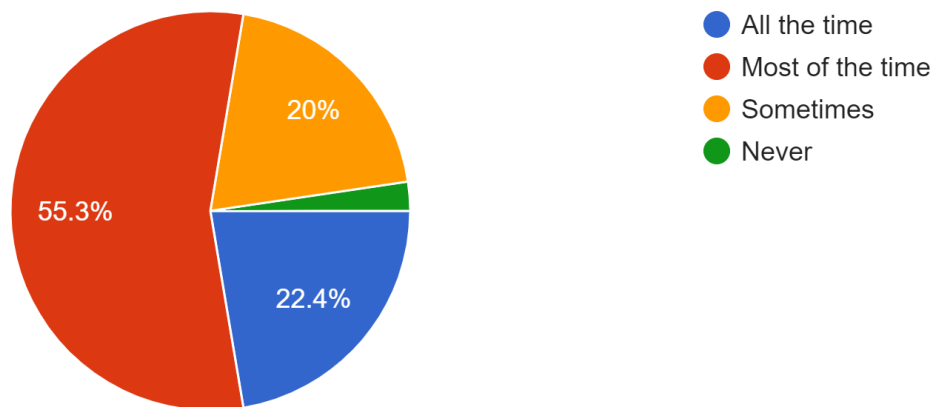


Figure 11 :Participants unable to deal with problems

In this study, the 26% participants who felt low i.e.: with uneasiness and disoriented were so much depressed that they were unable to deal with other problems of life. 24% complained of morning tiredness, headache, fear and anxiety, may be due to

poor sleep quality and antidepressants effect. Most of them were unable to recall things whatever asked. 40% took few minutes and then able to give answers whatever asked but 10% did not respond to any answer.

Do you find it difficult to recall things?

85 responses

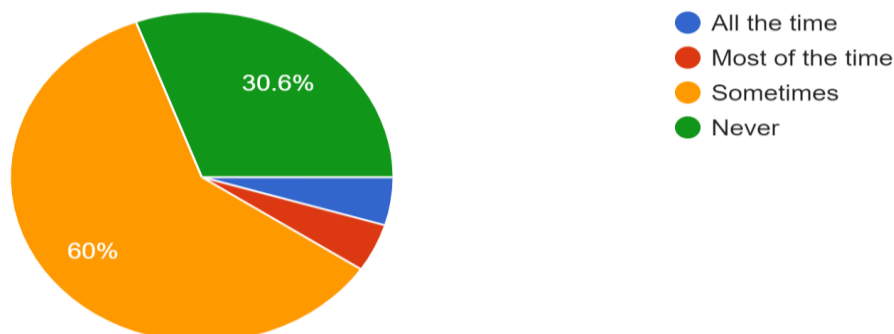


Figure 12 : Participants Who Find Difficult To Recall Things

Discussion

In this online survey, 100 participants took part in which 49.4% were females and 50.6% males. In our study Males presented with few psychological problems compared to females during COVID-19 outbreak. The impact on mental health was significant in females. These findings were similar to the study done by Varshney et al and Wang C et al where females had greater psychological problems due to the coronavirus outbreak^{15,29}. Among these 85 participants 80% were unmarried who took part in this research. We also noted the type of family in which the participants live. This could explain the environment of the house and thus their mental condition. In this study 79.3% lived in nuclear family, 11% had extended family and 9.8% were single. In other study also by Varshney et al most of the participants (61.3%) belongs to nuclear family only²⁹. Mental condition was more affected in people living singly and in nuclear family. This is a known fact that Loneliness worsens the situation. There is also evidence that duration of loneliness increases the risk of future depression among young people than the intensity of loneliness. Mental condition of 07 people were not satisfactory in our survey and they reported an acute stress disorder during this pandemic. Participants manifested irritability, insomnia, poorer concentration and performance, anxiety anger. Several studies in Asia reported a higher prevalence of post-traumatic stress disorders (PTSD) after COVID-19 Pandemic declaration within the general population like anxiety, depression, fear, irritability^{30,31}. Such people also had a fear of becoming infected if comes in contact with febrile patients or any other infected person and also fear of rejection by their neighbourhood or may face social stigma if comes positive. This fact was proved by many other studies also that during outbreak or Pandemic People also having fear of infection and then social disruption, discrimination, and stigmatization³².

05 of them having pre-existing mental disorder like depression, bipolar disorders and anxiety too. All 5 were from nuclear family and unmarried, having family history of mental disorders also. May be these factors would be responsible for their poor mental condition. They reported deterioration of their

mental health due to this pandemic. Other studies also reported the same that this pandemic produced major impact on mental health of health professionals³³ and people who had pre-existing mental health problem before the pandemic. According to many researchers, psychological symptoms had been increased in people with pre-existing mental disorders^{21,23,28,34}. 34 participants having average mental condition that means they feel anxiety, depression, stress many times but not always. Feelings of anger were present in these patients. In this survey 10 people complained of poor sleep quality during this pandemic,

In our study 26% participants felt low (uneasiness, tiredness, don't want to work) for more than 2 weeks in the past 3 months due to lockdown and pandemic. Among these, 7% considered their life as meaningless, they really need counselling. They were taking antidepressants. 40% sometimes considered their life was useless and meaningless but not always and soon they recovered themselves by listening song, watching movies and other entertainment. So they did not need counselling but they were taking antidepressants sometimes. The 26% participants who felt low i.e. with uneasiness and disoriented were so much depressed that they were unable to deal with other problems of life. 24% complained of morning tiredness, headache, fear and anxiety, may be due to poor sleep quality and antidepressants effect. Most of them were unable to recall things whatever asked. 40% took few minutes and then able to give answers whatever asked but 10% did not respond to any answer.

Impact on mental health and different Psychological Problems due to this pandemic was also reported by many researchers. They reported a higher prevalence of psychological problems like anxiety, depression, stress, irritability, anger, insomnia, post-traumatic stress symptoms during this Pandemic and Lockdown.^{13,31,34,35,36,37,38}

Rubin GJ and many other studies reported high prevalence of Fear and anxiety levels in healthy individuals as well as those with pre-existing mental health conditions due to this pandemic and lockdown³⁹. Previous studies in different occasions like anthrax letter attacks in the USA, outbreak of

novel influenza a (H1N1) in Japan , SARS outbreak, also reported prolonged effects on mental health of general public mental health like fear anxiety, depression .^{40,41}

Conclusion

The general public faced many psychological problems like anxiety, worries and insomnia especially after the declaration of lockdown in India on 24th March, 2020. Timely healthcare is needed for preventing further increase in mental health problems and Counselling by Psychiatrists needed as urgent treatment. Helpline numbers are provided by Government of India for proper guidance and counselling . World Health Organization has taken the necessary steps to deal with the psychological problems of people during the spread of Coronavirus .

Every child has their own way of expressing emotions so we should help children so that they can express their feelings without hesitation because children feel relaxed if they have safe and supporting environment. They become more irritable and demanding in such environment.

Instructions should be communicated to the aged people in a clear, respectful and patient way. The information could be given in form of pictures, news paper, via media , and also engage family members and helping old people to practice preventive measures like handwashing, sanitizing etc. Some older people might be familiar with digital methods and other may need guidance how to use them.

The right support can help the frontline workers and can help develop resilience in them making them more confident in their ability to manage stress in the future. The report of the country's response shows that they spend on an average 2% of their health budget on mental health services.

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