



A STUDY ON PERCEIVED STRESS AMONG ASYMPTOMATIC TO MILD COVID POSITIVE INPATIENTS ADMITTED TO A COVID DESIGNATED HOSPITAL

Torsa Das^{*1}, Dr. Amitabh Saha², Dr. Alok Chandra³, Dr. V.V. Gantait⁴

¹Psychiatric Social Worker of Base Hospital, Barrackpore, West Bengal, Pin Code- 700120.

²Head of the Psychiatric Department, Base Hospital, Barrackpore, West Bengal, Pin Code- 700120.

³Commandant, Base Hospital, Barrackpore, West Bengal, Pin Code- 700120.

⁴SR Dept of Psychiatry, IQ City Medical College & Hospital, Durgapur, West Bengal Pin code- 713206.

***Corresponding Author: Dr Amitabh Saha**

Psychiatrist, Prof & HOD, Base Hospital, Barrackpore, West Bengal, Pin Code- 700120.

Email id: sahaing@gmail.com, torsadas86.td@gmail.com **DOI:** <https://doi.org/10.17605/OSF.IO/SKH9C>

Contributing author: Dr Torsa Das, PSW, Barrackpore, West Bengal, Pin Code- 700120.

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ABSTRACT

Background – The COVID-19 pandemic has had a global effect on the world population. It has had a strong influence on both the physical and mental health of an individual, especially for those persons who are in the higher age group and have multiple medical comorbidity. Person having Covid infection are more susceptible to develop anxiety and depressive features during infection and hospitalization phase and even after recovery. No study has yet examined the presence of psychiatric comorbidity and the perceived stress that they undergo while being hospitalized which the present study has attempted to cover in the state of West Bengal, India. **Aim-** We examined the presence of depression, anxiety, perceived stress in asymptomatic to mild Covid positive inpatients of a Covid designated hospital in West Bengal. **Method-** 60 people, diagnosed with COVID-19 by testing by RT PCR and after taking their informed consent were taken up for the study. Two semi-structured scale comprising of the socio-demographic data sheet and clinical data sheet were administered to them. The Beck Depression Inventory, Perceived Stress Scale and Hamilton Anxiety Rating Scale were administered. After the data compilation was completed it was then assessed using the Statistical Package and Social Sciences Version 25 (SPSS 25.0) for analysis and interpretation. **Results-** Middle aged individuals with mild symptomatic Covid 19 infection were noted to be having high degree of perceived stress than the young population. Few had history of alcohol, tobacco and cannabinoids use disorder while some fulfilled the criteria for an abuse disorder. It was seen that mild depression, anxiety and perceived stress were present in the participants who were living alone. **Conclusion-** The results of this cross sectional study suggested that the middle aged people were most affected by the Covid-19. The symptoms increased with age, were noted especially more in people who were having substance use disorder and who were living alone.

KEYWORDS: COVID-19 pandemic, Depression, Anxiety, Perceived Stress, Age, Symptoms.

INTRODUCTION

Coronavirus disease (COVID19) is an infectious disease caused by a virus. It is a contagious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first case was identified in Wuhan, China, in December 2019. It has since spread worldwide, leading to an ongoing pandemic. Symptoms of COVID-19 are variable, but often include fever, cough, fatigue etc. Symptoms begin one to fourteen days after exposure to the virus. Around one in five infected individuals do not develop any symptoms.^[1] While most people have mild symptoms, some people develop acute respiratory distress syndrome (ARDS). ARDS can be precipitated by cytokine storms,^[2] multi-organ failure, septic shock, and blood clots. Long-term damage to organs (in

particular, the lungs and heart) has been observed. There is concern about a significant number of patients who have recovered from the acute phase of the disease but continue to experience a range of effects—known as long COVID—for months afterwards. These effects include severe fatigue, memory loss and other cognitive issues, low-grade fever, muscle weakness, and breathlessness. Dementia has been noted in elderly people who have contracted the virus and preexisting anxiety and depressive disorder has shown more relapses. Those who are infected with this virus experience various grades in severity of respiratory illness. COVID-19 primarily spread through droplets of saliva or discharge from nose when an infected person coughs or sneezes.

COVID19 affects different people in different ways.

Most common symptoms are

- Fever
- Dry Cough
- Tiredness

Less common symptoms are

- Aches and pains
- Sore throat
- Diarrhoea
- Conjunctivitis
- Headache
- Loss of smell and taste
- A rash on skin, or discolouration of fingers or toes

Serious Symptoms

- Difficulty in breathing or shortness of breath
- Chest pain or pressure
- Loss of speech or movement

The virus that causes COVID-19 spreads mainly when an infected person is in close contact^[3] with another person.^{[4][5]} Small droplets and aerosols containing the virus can spread from an infected person's nose and mouth as they breathe, cough, sneeze, sing, or speak. Other people are infected if the virus gets into their mouth, nose or eyes. The virus may also spread via contaminated surfaces, although this is not thought to be the main route of transmission.^[6,7] The exact route of transmission is rarely proven conclusively,^[8,9] but infection mainly happens when people are near each other for long enough. It can spread as early as two days before infected persons show symptoms, and from individuals who never experience symptoms. People remain infectious for up to ten days in moderate cases, and two weeks in severe cases. Various testing methods have been developed to diagnose the disease. The standard diagnosis method is by real-time reverse transcription polymerase chain reaction (rRT-PCR) from a nasopharyngeal swab.

The impact of Covid infection on the population is immense. If left undiagnosed and untreated, mental illness can negatively impact the development, social life, and even future careers of young people.^[10,11,12] Positive relationships have been found between DAS (Depression, Anxiety and Stress) and poor academic achievement^[6], poor peer friendship^[12], substance misuse and suicide attempts.^[13,14] COVID19 can lead to hospitalization and even death. It caused major health issues for adults over age of 60 years with particularly fatal results for those aged 80years and above. Conditions like diabetes, heart disease and other chronic illness can lead to more intense symptoms and complications in the disease. It also can be said that, our immune system gradually loses its resiliency with age, so older people are more susceptible to COVID19. Even people become contagious before showing any symptoms. (Centers for Disease Control and Prevention).

The impact of COVID-19 may play a significant role in triggering or worsening signs, symptoms, and eventual development of mental illness. With limited knowledge about COVID-19, the uncertainty of its trends, the worry over getting the disease itself, and drastic changes in lifestyles and livelihoods, the mental health of population has become a serious concern.^[15,16]

Researchers from the University of Oxford and NIHR Oxford Health Biomedical Research Centre evaluated the health records of 69 million people in the United States, which included over 62,000 people diagnosed with COVID-19. Nearly 6 percent of adults diagnosed with COVID-19 developed a psychiatric disorder for the first time ever within 90 days, compared to just 3.4 percent of patients who didn't have COVID-19. In other words, those who developed COVID-19 had a two times greater risk for developing a mood or anxiety disorder for the very first time. Older adults with COVID-19 also had a two to three times greater risk for developing depression. The researchers found that having a psychiatric disorder in the year before testing positive for COVID-19 was linked to a 65 percent greater risk for getting the disease.^[17,18]

People affected by this illness experience stress in varying degrees.

“Perceived stress is the feelings or thoughts that an individual has about how much stress they are under at a given point in time or over a given time period.” If the events are uncontrollable and unpredictable and undl ahs to often deal with annoying hassles, with frequent changes happening in his activity of daily living and reduced r confidence to deal with the problems then the level of perceived stress increases substantially.. So it can be said that perceived stress is not measuring the frequencies of stressful events rather it is how an individual feels about the general stressfulness of their immediate life and their ability to handle such stress (Encyclopedia of Behavioural Medicine). High stress for both men and women can lead to disease or unhealthy behaviour like consumption of high fat, less frequent exercise, cigarette smoking or less self efficacy for quitting smoking. Some person increase smoking in time of stress (Ng & Jeffery, 2003).

Ethyl alcohol based beverages is responsible for most of the harms in our body irrespective of whatever way it is consumed eg wine, beer or whisky etc. It weakens the immune system thus reducing the ability to cope with infectious disease. Even heavy use of alcohol increases the risk of acute respiratory distress syndrome which is one of the most severe complication of Covid-19. On the other side, alcohol consumption increases the symptoms of anxiety and panic disorders, depression and other mental disorders (World Health Organisation, 2020)

Fear and anxiety about new disease and uncertainty about own health and others are common in present

situation. Public health measures like physical distancing can make people feel isolated and lonely which increase stress and anxiety. This affects the sleep or eating pattern of a person, difficulty in concentration and increase use of tobacco and alcohol etc. During hospitalization various factors play a role in increasing the risk of developing a psychiatric illness like playing behind this stress are fear of losing body part or function, stress of undergoing operation and not knowing the outcome of treatment (Chhari & Mehta, 2016). Anxiety and depression symptoms in concurrent general medical conditions were associated with a specific socio demographic profile and this association has implications for clinical care. (De Fazio et al. 2017)

Present situation due to environmental stress caused by experiences of intensive therapy wards, pandemic fears and social restrictions promote psychiatric illness in people like depressive episodes, bipolar disorders, psychosis, obsessive compulsive disorder, post traumatic stress disorder. This disorder creates serious clinical challenges and especially for those who are infected with COVID19. (Sterdo et al. 2020). Depression is a major mental health problem throughout the world. Several studies have predicted that depressive disorder may tend to worsen during Covid infection, a prolong hospitalization phase or a stormy recovery phase.^[20,21]

It is often seen that presence of two or more diseases will worsen the prognosis of all the diseases that are present, leading to an increasing number of complications. If the comorbid condition is over looked the situation may worsen. This factor is particularly true for mental illnesses which are frequently comorbid with physical illness (Sartorius, 2013). On the other hand, some other researchers stated that stress caused by the COVID19 outbreak was often inherently emotional, so the best way to adjust was to change cognition. Perceived stress and anxiety was positively correlated but cognitive appraisal was negatively correlated with them. Due to lack of social expression and physical activities COVID19 isolated people who had difficulty in emotional regulation. It was also seen that the length of institutional quarantine time is associated with increasing risk of anxiety and depressive symptoms (Xu et al. 2020). As per studies the prevalence of stress, anxiety, and depression, in general population was 29.6, 31.9 and 33.7% respectively (Salari et al). The rapid transmission of the disease, concern about the future, distressing media reports, and rumors affected the mental health of the person as it increased frequency of developing anxiety, depression and post traumatic stress symptoms leading to classical stereo typing and discrimination in them (Salari et al. 2020). By keeping the previous studies in mind, this study was carried out to examine depression, anxiety and perceived stress (DAS) among asymptomatic to mild Covid positive inpatients.

1. METHOD

Participants and procedure

A proposal had been developed to conduct the study in a Covid designated hospital. Persons detected with COVID 19 and admitted in the inpatient department who were asymptomatic or having mild symptoms had been taken up for the study by using purposive sampling technique. After taking verbal consent from the participants, 60 persons would be included in the study. Socio demographic details and clinical data were taken by Semi structured socio demographic and clinical data sheet which were designed by the trainee researcher by using semi structured performa. After that other scales namely Beck Depression Inventory (BDI), Hamilton Anxiety Rating Scale (HAM-A), Perceived Stress Scale (PSS) were administered. After data collection, appropriate coding then statistical analysis was done accordingly.

Questionnaire and measurement scales

We used Semi Structured Socio Demographic Performa and Clinical Data Sheet, Beck Depression Inventory, Hamilton anxiety rating scale, Perceived stress scale.

Semi Structured Socio Demographic Data Sheet Semi structured performa was designed by the trainee researcher of general information about the responders such as age, sex, address, their rank, trade and other information according to the need of the indl.

Semi Structured Clinical Data Sheet

Semi structured performa was designed by the trainee researcher including primary symptoms of Covid 19, probable cause of the disease, history of psychiatric illness, family history of illness etc.

Beck Depression Inventory

This inventory was developed by Beck et al. in 1961. It was a 21 item self reporting questionnaire for evaluating the severity of depression in normal and psychiatric population. It is 4 point likert scale with internal consistency for the BDI which ranges from .73-.92 with a mean of .86.

Hamilton Anxiety Rating Scale

This scale was developed by M. Hamilton in 1959. It was a 5 point likert scale with 14 questions and it defined a series of symptoms and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety).

Perceived Stress Scale

This scale was originally developed in 1983 which helped us to understand how different situations affect our feelings and perceived stress. It is a 5 point Likert scale with 10 questions.

Statistical analysis

All statistical analysis using Statistical Package for Social Sciences (SPSS) version 25. We carried out

descriptive statistics (mean & standard deviation) for socio demographic and clinical profile, depression, anxiety and stress of persons with COVID 19 and Pearson correlation was used to compute the association among the variables.

2. RESULTS

The socio demographic details of the persons with COVID19 were listed in Table 1. It revealed that mean age of the persons was 36.47years. Majority of the persons were living alone and were males. Majority of them resided in semi urban area and were Hindus. Majority of them had completed their graduation.

Clinical profile of the persons with COVID19 were listed in Table 2. Majority of the individual had mild symptoms of Covid 19. Majority of the individual had no

family history of mental illness and physical illness. 6.6% persons were taking alcohol, 15% tobacco and 3.3% were taking cannabinoids.

Depression, anxiety and perceived stress were listed in Table 3. Mean and SD of Depression, anxiety and Perceived Stress were 4.75 ± 3.785 , 4.52 ± 2.891 , 9.83 ± 6.062 respectively.

Relation between age and symptoms of persons with Covid-19 was listed in Table 4. There was significant positive relation which existed between the age and symptoms of persons with Covid19.

Relation among depression, anxiety and perceived stress in persons with Covid-19 was listed in Table-5.

Table – 1: Socio Demographic Profile of Persons with Covid 19.

VARIABLES	CATEGORIES	INDIVIDUALS WITH COVID 19 Frequency (%) Mean \pm SD [n=60]
Age (years)		36.47 \pm 8.919
Sex	Male	60(100%)
	Female	-
	Others	-
Education	No Formal Education	-
	Primary Education	-
	Secondary Education	-
	Higher Secondary	24(40%)
	Graduate	36(60%)
	Post Graduate	-
Religion	Above Post Graduation	-
	Hinduism	54(90%)
	Islam	6(10%)
	Christian	-
Residence	Others	-
	Rural	-
	Semi Urban	34 (56.6%)
	Urban	26 (43.4%)
Staying	Urban Metro	-
	With family	15(25%)
	Single	45(75%)

Table - 2: Clinical Profile of Persons with Covid 19.

VARIABLES	CATEGORIES	INDIVIDUALS with COVID19 Frequency (%) or Mean \pm SD [n=60]
Symptoms	Asymptomatic	27(45%)
	Mild symptomatic	33(55%)
Physical Illness	Yes	14(23.4%)
	No	46(76.6%)
Substance abuse	Alcohol	4(6.6%)
	Tobacco	9(15%)
	Cannabinoids	2(3.3%)
Substance use (Occasionally)	Alcohol	25(41.6%)
	Tobacco	6(10%)
Family History	Yes	3(5%)
	No	57(95%)

Table-3: Depression, Anxiety and Perceived Stress in Persons with Covid19.

VARIABLES	MINIMUM	MAXIMUM	MEAN \pm SD (N=60)
DEPRESSION	0	13	4.75 \pm 3.785
ANXIETY	0	10	4.52 \pm 2.891
PERCEIVED STRESS	0	20	9.83 \pm 6.062

Table-4: Relation Between Age and Symptoms of Persons with Covid-19.

	SYMPTOMS
AGE OF THE PARTICIPANTS	.366**

** Correlation is significant at the 0.01 level (2-tailed)

Table-5: Relation Among Depression, Anxiety and Perceived Stress in Persons with Covid-19.

	Asymptomatic MEAN \pm SD	Mild MEAN \pm SD
DEPRESSION	-	.252
ANXIETY	.252	-.074
STRESS	.076	-.069

Correlation is significant at the 0.01 level (2-tailed)

3. DISCUSSION

Table no 1 revealed that mean age of affected people was 36.47 years. The study sample were of a younger age group predominantly An Indian study revealed that middle age to elderly people were at high risk of getting Covid infection and they required proper social and medical care to prevent it (Singh et al. 2020). It was inferred from the data that this study that middle aged persons had to work, were economically productive and had to go frequently outdoors for household work and were more susceptible to the disease. In current study the sample population were comprising of a younger age group and the work by earlier studies had covered all age domains.

Majority of the persons were living alone. As per the social learning model, family provided immense emotional support to people in stressful times which in turn improved their psychosocial functioning in terms of reducing stress and improving positive orientation of feelings and also improving physical health (Mohoney et al. 2000). Hence social support is an important factor in one's life as it enhances the ability to cope with stress or to alleviate the impact of the stressful event on the person (Choenaron et al. 2005). Family or a support system is very much needed for reducing the psychiatric morbidity and in improving the physical health after discharge from hospital. This study did reveal higher PSS score in indls staying alone. Table 2 studied the significance of family history, physical illness or substance use pattern of persons affected with Covid 19. Some people in the study were diagnosed with substance abuse disorder including alcohol, tobacco and cannabinoids but were not fulfilling the dependence pattern as per ICD -10 criteria. The correlation with them developing features of DAS was not statistically significant.

Table no 3 showed the presence of depression, anxiety and perceived stress in persons with Covid 19 but it was not statistically significant. It was seen that in the age

group of 30-50 years and above, people were less affected by routine stressors, experienced less financial problems and concurrently predicted psychological distress well in advance. In this study all the participants were government employee and involved in high physical activity daily and most of them belonged to young to the middle age group.

Table 4 revealed the relation between age and symptoms of persons with Covid-19. In the elderly the symptom severity index were enhanced with advancement of age. No statistical significance was noted in present study.

Table 5 showed the relationship among depression, anxiety and perceived stress in persons with covid-19 symptomatology. In this table no statistical significance was noted in disease severity with the psychiatric morbidity. During the course of this study and after gathering all data and its subsequent compilation and inference, it was seen that elevated stress was associated with more frequent health problems, higher burnout and fatigue. How indl people coped with the illness and perceived stress in this time frame had a bearing on predicting emerging depressive symptoms, anxiety, and sleep deprivation. Even though these did not weigh in with significant statistical measure, it was definite area of concern that needed to be addressed. Those who had higher stress levels did report higher PSS score which was in consonance with other studies (Haghighi & Gerber, 2019). The findings of the current study were similar to those of previous studies, which suggests that the COVID-19 pandemic has no significant impact on the selected DAS variables if studied in a smaller time frame.

One possible explanation is that at the time of this study, the epidemic may have crossed the peak, and the number of reported cases was relatively insignificant in the study settings. In order for people to be psychologically affected, two of the following four conditions should ideally be met: (1) a large number of injuries and

casualties should be reported, (2) mass damage to property, (3) disruption of social support, and [4] ongoing economic problems.^[7] At the time of the data collection, most of these conditions were not present, which may explain the relatively similar prevalence rates of DAS among the study sample before and after COVID-19.

In the current study, several factors were associated with DAS prevalence rates. Some of these variables were also reported in previous literature, including gender, having a friend and/or family member diagnosed with mental illness, and using the internet. Younger age group have higher levels of DAS.^[10,11,12] Mental illnesses affect not only the diagnosed person but also the surrounding people, such as family members and friends.^[13,14,15] Income, age, academic status, working in a rural, semi urban, urban city, and health-related condition were other predictors identified in previous literature.^[16-18] but not measured in the current study. Those living in poorer financial conditions have higher rates of DAS than those in high-income families.^[19-20] In the current study, the same association could not be proven as the income bracket of the inpatients were proportionately same and therefore, it was not taken into much consideration in the analysis. It is clear that DAS is a mixture of biological, personal, spiritual, emotional, and social factors and that income is only one factor. There is a need to regularly screen at risk people and identify the newly evolved variables associated with DAS.^[20]

Limitations

In this study no female patients were in the sample. It included the patients of a particular Covid designated hospital with no inclusion of patients of other hospital or those who were in home quarantine was included in the study. All participants were government employee; patients of other working sectors were not included in the study. The sample size was small and number of asymptomatic and mild symptomatic was not equal. A longitudinal prospective study may provide closer and clearer picture of the disease as well as the caregiver burden assessment. Hence a follow up study post discharge may actually reveal the impact burden of the illness and hospitalization on an individual.

CONCLUSION

In conclusion, our study suggests that the Covid 19 infection may have an adverse effect on the psychological well being of the affected people with age of the person and the symptom severity index of infection being the key factors to be studied in greater detail. Persons staying alone and who were hospitalized with Covid infection showed a higher PSS score. The psychological, physical and financial impact that the covid-19 infection may bestow on the indls is a cause for concern especially if the age criteria was considered along with his social support mechanisms. An existing co morbid psychiatric disorder like a substance abuse disorder with the Covid infection per se also would need

special attention. The evidence of higher rates for depression and anxiety features were noted in higher age groups but was not statistically proven.

Ethical considerations- Informed consent was taken from all the participants. This study was used only for academic and research purposes.

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Conflict of interest – None.

REFERENCES

1. Alcohol and covid-19: What you need to know. (2020). World Health Organization.
2. Bendau. A., Petzold.B.M., Pyrkosch.L., Maricic.M.L., Betzler.F., Rogoll.J., Grobe.J., Strohole.A & Plag.J. (2020). Association between covid-19 related media consumption and symptoms of anxiety, depression and covid-19 related fear in the general population in Germany. *European Archives of Psychiatry and Clinical Neurosciences*. <http://doi.org/10.1007/s00406-020-01171-6>.
3. Chhari.N & Mehta.S.C. (2016). Stress among patients during hospitalization: A study from central India. *Ntl J Community Med*, 7(4): 274-277.
4. Choenaron.C., Williams. A & Hagerty.M.b. (2005). The role of sense of belonging and social support on stress and depression in individual with depression. *Archives of Psychiatric Nursing*, 19(1): 18-29.
5. Chowdhury, A.M., Hossain.N., Kashem.A.M., Shahid.Md.A & Alam.A. (2020). Immune response in covid-19: A review. *Journal of Infection and Public Health*, 13: 1619-1629.
7. De Fazio.P., Cerminara.G., Ruberto.S., Caroleo.H., Puca.M., Rania.O., Suffredini.E., Procopio.L & Segura-Garcia.C. (2017). Hospitalization and other risk factors for depressive and anxious symptoms in oncological and non oncological patients. *Psycho-Oncology*, 26(4): 493-499.
8. Feizi.A., Aliyari.R & Roohafza.H. (2012). Association of perceived stress with stressful life events, life style and socio demographic factors: A large scale community –based study using logistic quantile regression, computational and mathematical methods in medicine, 151865. <https://doi.org/10.1155/2012/151865>.
9. Florinda.F.H., Kleiner.R., Koubi.V.D., Acurcio.C.R., Carreira.B., Yeini.E., Tiram.G., Liubomirski.Y & Fainaro.S.R. (2020). Immune mediated approaches against covid-19. *Nature Nanotechnology*, 15: 630-645.
10. Haghghi M & Gerber.M. (2019). Does mental toughness buffer the relationship between perceived stress, depression, burnout anxiety & sleep? *International Journal of Stress Management*, 26(3): 297-305.
11. Li.L., Li.F & Krystal.H.J. (2020). Association of a prior psychiatric diagnosis with mortality among hospitalized patients with coronavirus disease 2019

- (COVID-19) infection. *JAMA Netw Open*, 3(9).
12. Mohoney.E.J., Eisner.J., Havighurst.T., Gray.S & Patta.M. (2000). Problems of older adults living alone after hospitalization. *Journal of General Internal Medicine*, 15: 611-619.
 13. Ng.N.D & Jeffery.W.R. (2003). Relationship between perceived stress and health behaviour in a sample of working adults. *Health Psychology*, 22(6): 638-642.
 14. Phillips.C.A. Encyclopedia of Behavioural Medicine (2013ed).
 15. Salari.N., Hosseinian-Far.A., Jalali.R., Vaisi-Raygani.A., Rasoulpoor.S., Mohammadi.M., Rasoulpoor.S & Khaledi-Paveh.B. (2020). Prevalence of stress, anxiety, depression among the general population during the covid-19 pandemic: A systematic review and meta analysis. *Globalization and Health*, 16: 57.
 16. Sartorius.N. (2013). Comorbidity of mental and physical diseases: A main challenge for medicine of the 21st century. *Shanghai Archives of Psychiatry*, 25(2): 68-69.
 17. SterdoJr.L., Steardo.L & Verkhatsky.A. (2020). Psychiatric face of Covid-19, *Transl Psychiatry*, 10: 261.
 18. Singh.P.H., Khullar.V & Sharma.M. (2020). Estimating the impact of covid-19 outbreak on high risk age group population in India. *Augmented Human Research*, 5: 18.
 19. www.cdc.gov
 20. www.who.net
 21. Xu.C., Xu.Y., Xu.S., Zhang.Q., Liu.X., Shao.Y., Xu.X., Peng.L & Li.M. (2020). Cognitive reappraisal and the association between perceived stress and anxiety symptoms in Covid-19 isolated people. *Front Psychiatry*, 11: 858.