Original Research Article

Impact of covid-19 pandemic on the mental health status and quality of life (AOL) among people of India

Sourya Kumar [1],*, Shubham Kr Gupta [2]

[1] *Shaheed Nirmal Mahto Medical College (SNMMC), Dhanbad, Jharkhand, India*
[2] *Dept. of Dentistry, Rajendra Institute of Medical Science, Ranchi, Jharkhand, India*

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ABSTRACT

Aim: Our study aims to examine the influence of COVID-19 on psychological and mental well-being, along with its impact on overall quality of life.

Materials and Methods: A cross-sectional study was conducted from July 24, 2020, to October 3, 2020, involving Indian adults residing in India. Participants were recruited using convenient and snowball sampling methods, reaching out through a Google form distributed via social media platforms. A total of 305 participants responded to the survey, providing socio-demographic information and answering 14 validated questions related to stress, anxiety, socioeconomic impact, and social support. Data was collected anonymously and analyzed confidentially.

Conclusion: The COVID-19 pandemic significantly impacted our sample, causing moderate to severe stress due to peak cases in India. Our findings highlight the need for increased mental health awareness, support for friends and family, and future research. Ongoing pandemic effects require confirmation in larger populations. Policymakers should prioritize positive attitude development and effective policy implementation.

1. Introduction

A case of viral pneumonia was reported in Wuhan province of China on 31st of December 2019 by 'Wuhan municipal health commission'. Later, on 3rd January 2020 called it as, 'viral pneumonia of unknown cause'. After a week of its initial outbreak, it was identified as Novel Coronavirus(n-CoV/ SARS-CoV-2) responsible for causing Coronavirus disease.(COVID-19)(1) A phase-adjusted estimation of epidemic dynamic assumed that the effective reproduction number $R_\bigcirc$ was 3.1 and could gradually decrease which is comparably higher than the past COVID-19 infection such as SARS and MERS.[1] Expert predict the Coronavirus has low pathogenic but highly transmissible.[2] The virus mainly spread via droplets but can also through direct contact and oral faecal route[3] Finally, on 11th March 2020, WHO declared COVID-19 as pandemic as Italy, Iran, South Korea and Japan reported surging number of cases.

First case of COVID-19 in India was reported on 30th January 2020 in the state of Kerala.[4] By 2nd of October 2020, this pandemic has infected a total of 34,375,469 people and been responsible for causing death of more than 1 million people across the global.[5] In India, more than, 1 lakhs people have died due to Coronavirus disease, infecting more than 6.4 million people till date.[5]

On 24th March 2020, Government of India ordered a national wide first lockdown for a period of 21 days, followed by its extension for 19 days, 14 days and 14 days respectively.[6]

* Corresponding author.
E-mail address: sourya787025@gmail.com (S. Kumar).

The sudden outbreak of novel Coronavirus and period of locked down, Quarantine, has created an atmosphere of stress, fear and sudden panic and this might have lead to psychological wear and tear among common Indian population. Health care professional and students were found to experience stress, anxiety and depression more than others.[7] Recent evidence, has showed increase in negative psychological effects and symptoms of anxiety and depression in Chinese college going students.[8] Its often, happen at the time of any unknown/no outbreak that people tend to experience fears of getting infected with virus/disease, that eventually leads to stress & anxiety.[9] Previously, similar trends of psychological impact was observed after the outbreak of Ebola virus. Symptoms of PTSD (post-traumatic stress disorder), anxiety and depression were seen in a report of Sierra Leone.[10] Fear related behaviour & stigma situation are common during outbreak. This also contribute towards anxiety, depression and PTSD and negatively impact score of mental health.[11] There has been reports stating the important links between anxiety & depression associated with viral disease, such as, Influenza-A (H1N1) and other Influenza virus, Hepatitis C, HIV, HSV, Varicella zoster virus.[12]

At time of changing environment or external conditions, the maintenance of life is critically depends upon keeping our internal milieu' constant. I.e. homeostasis.(Claude Bernard 1865/1961).[13] Stressor may be said, as, the actual perceived threats to an organisms & organisms response to given stressor is referred as 'stress'. Selye (1956) used the term stress to represent the effects of anything that seriously threaten homeostasis.[14] Psychological response to infectious diseases are variables, can range from feeling of anxiety to suicidal tendency that include weakness, misinterpretation of happening around or can also lead to fear of getting infected to oneself or theirs loved ones. In an era of pandemic situation/locked down/ quarantine leads to disruption of daily schedule, separation from family members, fear of death, socio-economical insecurities (loss of jobs, lacks of fulfilment of basic needs of day to day life). This naturally creates an atmosphere of powerless, helpless, boredom and loneliness.[15]

In a Chinese longitudinal study on the mental health of general population also reveals, that during initial evolution of pandemic, moderate to severe stress and anxiety and depression were 8%, 28.8% and 16.5% respectively.[16] The most frequently reported problems during pandemic were pain, discomfort (19%) and anxiety-depression (17.6%). This trends shows a significant increase curve among people with order age groups, with chronic disease, lower income.[17] To date, there are many published articles that recorded "what virus (SARS-CoV-2) does to our Body I.e. clinical manifestation. However, there are limited evidence to clarify "what are its impact on psychological/mental health and Quality of Life (QoL) in Indian population.

Therefore, this study aims to investigate impact of COVID-19 pandemic on mental health, its related lifestyle habits and quality of life among Indian Adults, After phase-4 lockdown, that ended on 31st May 2020. During the phase of unlock-2 till end of unlock-4 and first week of unlock 5.

2. Materials and Methods

Cross-sectional study was performed, from 24th July 2020 until 3rd October 2020. Only adults of Indian nationality and currently dwelling in India, who were willing to understand English language and were willing to participate, were recruited in this study, using convenient & snowball sampling methods.

A google forum were created and distributed among common people of India, using various social media platforms like, Facebook, WhatsApp. In order to maintain social distancing and other special operating procedures issued by Government of India. Face to Face or direct contact was avoided. A total of 440 participant were asked to fill the form completely, out of this 345 people responded but 40 responded were unable to provide their complete details, this were excluded. 305 participants who were adults (18=< years old) kept for data analysis. We collected data anonymously without collecting information that could identify the person.

Once, the user click the given link, they were provided information regarding the aim and nature asking theirs this study. Additionally, with a disclaimer asking there written concern in participating this survey that their personal details will be kept confidential. Questionnaire considered of and an assurance The two column, first asking socio-demographic details, were as second column 14-validated questionnaire related to stress, anxiety, Socioeconomic impact & support from family and friends. Written consent was taken and No monetary or any reward was awarded to the participants.

3. Results

3.1. Participants characteristics

Out of 440 participants, invited to participate in this research study 345 subject responded (78.4%) were willing to participate and has answered but out of this only 305 out of 345 were accepted for this research. (11.5% were excluded; reason were lack of complete information and below 18 years of age). Those who decline this study didn't mention any reason, after completion of time duration. We speculated that they were unwilling to participate, hence, we opted them out. The mean age of participants (n=305) was 28.5,(ranging from 18-62) and 73.77 % (n=225) were in between 20-30 years. The mean value of male were found to be almost equal to female. However, no significant difference was observed.(Male n= 153 to female n= 152 ; 50.2%, 49.8% respectively). All

the participants were educated, had at least higher senior secondary level of education. Except 1.96 % of participants reported below class 12. Most of them had graduation degree in different streams. 51.1% had mentioned graduate as their the highest level of education. Other 12.5% were post graduate and 31.1% were university going student. Additionally, 70.8% of participants were unmarried. Most of the single participants were having graduate degrees or were student. In terms of employment only 20.3% were having a full time employed. In the other hand 6.9% had part-time job or earning money. While, most of them were student 50.8%. Keeping student in category of unemployed, the unemployed graphs increase to 72.8%. This is also a risk factors for developing stress, anxiety and depression. Unemployment is a potential situational stress and leads to the development stressor of transitioning to young adulthood and may contribute to magnify experience of depression.[18] Unemployment has been linked increasing stress, anxiety and mental health issues at least for short duration of time, specially in young adults. However, its possible long team effect is often referred as 'Scarring effect', possibly underestimating the magnitude of mental health burden that young adult unemployment generates.[19]

In an era of Covid-19 pandemic several reports has been published stating a constant decrease in employment rate.[20] These, also has huge possibility and probability, also might have created a situation of anxiety and depression among the Indian population. In a German research it has been documented that 60% of the considerably increased inflow from employment into unemployment. If such a critical situation has arises due to COVID-19 and locked down in developed country.[20] Question of it might have not affected on Indian population doesn't arise.

3.2. Prevalence of work and economical issue in Covid-19

In our study, the majority of participants reported, that they are experiencing work related stress, most often and at least sometimes 74.8 % in total.

Facing work- related stress — Yes (48.2%)

-Sometimes- (26.6 %)

While, only 25.2% said that they do not face any work related stress. Those responded, who denied any work related stress were mostly university going students and unemployed. A slightly different pattern was observed, at the time of answering financial stress. The same group of population of students answered that they are facing financial stress. It has been found that, financial stress/insecurity don't only effect the person experiencing it but has also 'contagious' effect on their children.(R). Similarly, here undergraduate students and Not-earning categorized participant, are under financial stress. Might because of their earning family members are under financial crisis. As, 2019-20 economic crisis are worse than of 2008,

Table 1: Demographic distribution of the study population

Demographic variables	Respondents	N (%)
1) Gender		
• Male	153	50.2
• Female	152	49.8
2) Age group		
• 19-29	211	68.1
• 30-39	72	23.6
• 40-60	20	6.55
• Above 60	2	0.655
3) Marital status		
• Married	86	28.2
• Single	216	70.8
• Divorce	3	1
4) Educational status		
• Graduation	156	51.1
• Under graduation	95	31.1
• Post-graduation	38	12.5
• Others	16	5.2
5) Employment status		
• Unemployed	67	22
• Student	155	50.8
• Full time	62	20.3
• Part-time	21	6.9

due to Coronavirus pandemic.[21] And has all segment of society, specially, Lower-middle, socio-economic backward class of people. In an additional, More, likely to affect India and its population by increasing poverty and creating gap between people. (I.e. Socio-economic inequality).[22] Likewise, 64.3% of participants in our study said they are facing financial stress most often (yes) while, 17.7% said "sometimes and only a small percentage, (18%) comparably said ' they are not facing financial stress'. In this most people were having full-time job and hence, were kept under full-time employed categories.

3.3. Prevalence of personal stress and impact of Covid-19

The trauma of finding themselves or theirs loved one, testing positive or dying due to this "previously unseen COVID-19, has created fears among Indian masses. Some, media reports have stated that several cases have been reported in India were people committed suicide or attempted, just because they fear of getting infected or worried about the future.[23]

This, might also create a gap in an individual personal life, leading to anxiety, depression and fear.

To assess, theirs personal life status and Coronavirus disease impact. We, asked questions like, personal stress and feeling.

There were 49.5% of personal agreed that, they are facing stress related to personal matter, and 24.9% of responded said "sometimes" and 25.6% said they didn't face any personal matter related stress.

In, case of feeling regarding this Coronavirus disease, 68.9% of total said that, they feel horrified due to COVID-19, and 18.4% said marked "sometimes ", while 12.8% a significantly lower, reported "No" as their answer. So, here, 87.3% of people feels horrified due to this pandemic or COVID-19 at, least sometimes. People are naturally concerned for their own and their loved ones' health and safety. There is still much uncertainty. Its natural phenomena to feel apprehensive, Horrified, helpless in an era of pandemic. (Reference). Additionally, in our study, 64.6% feel apprehensive due to the Covid-19 most of the time, while 20.3 % feel sometimes, others 15% don't feel. On, the other hand some people, who felt apprehensive due to Coronavirus disease, most of them reported that they also feel helpless. 66.2% out of total participate were feeling helpless mostly or most of the time and 14.9 % felt helpless sometimes, while 18.9% doesn't felt like wise. Most of the participants were worried as the number of cases is significantly increasing and were worried about getting infected with SARS-CoV-2. 78.7 % of total subject in our study is worried most of the time, while 16.1% sometimes, were as 16% were not worried at all. 71.1% is worried that they will get infected, 20.3% said they get sometimes worried about getting infected, while only 8.5% were not afraid at all. Similar treads was observed in case of post COVID-19 future, 73.4% were worried about future most of the time, while, 16 used to get sometimes worried, whereas, only 10% were not worried about post COVID-19 future. A report published by 'Carers Trust' also stated that 67% of young carers and 78% of young adult carers are more worried about the future since Coronavirus. And Steep decline in mental health of young carers and young adult carers following Coronavirus outbreak was observed.[24]

3.4. Prevalence of psychological support from family and friends

Lockdown and self-home quarantine, has forced people to be isolated and remains, in a closed home environment. They're rarely allowed to move out, in case they step out, unknown or unwanted fear of getting infected with SARS-Cov-2 virus has given birth to degradation of family-interrelationship, as, a result family members are conformed by the vulnerabilities of each other's addiction, angers, frustration and violence. This has much more effect on school going children, as, School are closed nowadays.[25] In this study, we observed, decrease in support from friends (53.1%), only 14.8% of total population said, increase in support from friends, while 32.1% reported they're getting the same support as earlier. A significant increase in support from family members was seen approximately 35.1%, were as, 36.1% reported no change in support from family or same as before, Additionally, 28.9% said decreased in support from family members. When it comes to, taking proper care of family members and theirs feelings 43.6%

said "they are not able to take care of family members and theirs feeling as earlier, In the other hand, 23.6% have said they are able to take care as earlier, no significant changes. While, 32.8% said increase in caring.

Majority, more than half 54.1% said they were unable to take care as previously. While, 25.9 said increase in their attention towards mental health, and 20% said attitude towards mental health has not changed and was the same as before. Time spent for relaxing was found to be decreased in 49.5% of the population, were 31.5% reported increase in time duration used for relaxing, while, 19% reported 'no changes' or same as before. No, any significant changes was observed or noted between the male and female responded, in questioner like "support from family, friends, taking care of family members'. However, answering, stress related questions such as, worried about Covid-19, feeling apprehensive, horrible, emotional stress, helpless, afraid of future, getting infected female was more likely to develop or likely to get frightened and stress out as compared with male. Table 5 & 6 explain the details' comparison.

Interesting, female spend less time to relax in pandemic as, male. Decreased in relax time is observed. This might be because, after a long decay, it has been noticed that parents, along with children and even grand children is forced to live under the same roof, due to generalize or regional lockdown.(R...) There by increasing household related work that is directly or indirectly diverted to female members of a family. Although, domestic works (like baby sitting, cooking, cleaning, caring for order people or sick etc.) are not only done by female but globally, girls are responsible for 75% of unpaid care and domestic work in homes and community.[26]

'Chaplin, Tara M et al.' In his report suggested that, that men and women respond to stress differently, with women experiencing greater sadness and anxiety, while men show a greater integration of reward motivation (craving) and emotional stress systems[27] Our study shows that male were more inclined towards paying attention to mental health, also, male responded were more concern about the feeling of family members and in caring nature, This can be correlated with the increase stressed level of female, that, might have decreased their care and feeling responsibility towards family members and their mental health.

Other socio-demographic variables, including, location and marital status of the population didn't reveal, any significant difference in the survey.

4. Discussion

Coronavirus disease has induced a state of stress and psychology status of being unwell and fear among the common masses across the globe. Emergence of this disease has exhausted the resources and economy. Therefore, limited data is available explaining, its psychological implications, mental health and impact on Quality of life

Table 2: Stress & anxiety related variables of total responded (n=305)

Negative Impact of Mental health of total precipitants, Using variables related to stress & anxiety		
Variables	Respondents	N (%)
1) Increased stress from work		
a) Yes	147	48.2
b) No	77	25.2
c) Sometimes	81	26.6
2) Increased financial stress		
a) Yes	196	64.3
b) No	55	18
c) Sometimes	54	17.7
3) Increased stress related to personal matter		
a) Yes	151	49.5
b) No	78	25.6
c) Sometimes	76	24.9
4) Fell horrified due to Covid-19		
a) Yes	210	68.9
b) No	39	12.8
c) Sometimes	56	18.4
5) Feel helpless due to COVID-19		
a) Yes	200	66.2
b) No	57	18.9
c) Sometimes	45	14.9
6) Feel apprehensive due to COVID-19		
a) Yes	197	64.6
b) No	46	15.1
c) Sometimes	62	20.3

Table 3: Changes in family and social support of total responded.

Changes in psychological support from friends & family and there feelings n=305		
Variables	Respondents	N (%)
Getting support from friends		
a) Decreased	162	53.1
b) Increased	45	14.8
c) Same as before	98	32.8
Getting support from family		
a) Decreased	88	28.9
b) Increased	107	35.1
c) Same as before	110	36.1
Able to take proper care of your family members and their feelings		
a) Decreased	133	43.6
b) Increased	100	32.8
c) Same as before	72	23.6
Able to pay attention to your mental health		
a) Decreased	165	54.1
b) Increased	79	25.9
c) Same as before	61	20
Worried as number of COVID-19 cases are increasing		
a) Yes	240	78.7
b) No	16	5.2
c) Sometimes	49	16.1
Worried about getting infected with SARS-CoV-2		
a) Yes	217	71.1
b) No	26	8.8
c) Sometimes	62	20.3
Worried about post COVID-19 future		
a) Yes	224	73.4
b) No	49	10.5
c) Sometimes	32	16.1
Time spent to relax		
a) Decreased	151	49.5
b) Increased	96	31.5
c) Same as before	58	19

(QoL). Our study explored the "Impact on mental health and Quality of Life ". During Covid-19 pandemic in Indian general population. Evidence has suggested that prevalence of symptoms of adverse psychiatric outcomes among the public when compared to the prevalence before the pandemic. [13]

Females are at three times higher risk of developing stress, anxiety compared to their male counterparts. These gender differences in psychological distress including depression and anxiety have been described previously. Several studies have demonstrated that female gender is a risk factor for developing mental illness where women have been reported to have 1.6 greater incidence of depression compared with men. This could be attributed to increased frequency of hormonal fluctuation in women compared with men. [28]

Secondly, more educated people are less to be affected as compared to uneducated or less educated. Similar, the finding was recorded in our study. Work related and financial stress was found to be increased and prevalence of anxiety was also recorded high. We speculate that, Predicative factors that might have contributed because

of a successive four phases of lock down, increase in unemployment. It also has been said that higher the socio-economic status with awareness were associated with significantly decrease in psychological impact/mental. [29] Due to the pandemic awareness and adoption of preventive measure has forced a sudden changes in behaviour(like mask wearing at individual level. [30] This might have also added fear and negative impact on mental health.

Recently, published studies from countries like China, Spain, Italy, Iran, US, Turkey, Nepal, and Denmark has reported that high rates of symptoms of anxiety (6.33% to 50.9%), depression (14.6% to 48.3%), post-traumatic stress disorder (7% to 53.8%), psychological distress (34.43% to 38%), and stress (8.1% to 81.9%) are reported in the general

Table 4: Demographic comparisonbetween male and female.

Demographic variables	Male (n=%) Total- 153	Female (n=%) Total- 152
Mean age	28.1	27.18
Maximum age	62	58
Minimum age	18	18
Education		
1) Post graduate	10.4	14.4
2) Under graduate	35.7	26.3
3) Graduate-	46.1	55.9
Employment status		
1) Part-time	7.1	6.6
2) Unemployed	14.9	28.9
3) Student	50.6	51.3
4) Full-time	27.3	13.2
Marital status		
1) Married	22.7	33.6
2) Single	77.6	65.1
3) Divorced	0.6	1.3

Table 5: Comparison between Male and female responded related stress and anxiety related variables

Variables	Male % Total- 153	Female% Total 152
Facing work related stress		
a) Yes	50	46.1
b) No	24	26.3
c) Sometimes	26	27.6
Facing financial stress		
a) Yes	66.9	61.8
b) No	19.5	16.4
c) Sometimes	13.6	21.7
Facing stress related to personal matter		
a) Yes	53.9	45.4
b) No	23.4	27.6
c) Sometimes	22.7	27.0
Feel horrified due to COVI-19		
a) Yes	60.4	77.6
b) No	16.2	9.2
c) Sometimes	23.4	13.2
Feel apprehensive due covid-19		
a) Yes	58.4	71.1
b) No	20.1	9.9
c) Sometimes	21.4	19.1
Feel helpless due to Covid-19		
a) Yes	58.3	74.3
b) No	21.9	15.8
c) Sometimes	19.9	9.9

Table 6: Comparison between male and female responded psychological support and feeling related variables

Variables	Male	Female
Getting support from friend		
a) Increased	18.2	11.2
b) Decreased	47.4	58.6
c) Same as before	34.4	30.3
Getting support from family members		
a) Increased	40.9	29.6
b) Decreased	20.1	37.5
c) Same as before	39.0	32.9
Are you able to take proper care of your family members and theirs feeling		
a) Increased	40.9	25.0
b) Decreased	31.2	55.9
c) Same as before	27.9	19.1
Are you able to pay attention to your mental health		
a) Increased	35.7	16.4
b) Decreased	41.6	66.4
c) Same as before	22.7	17.1
Are you worried as number of infected person is getting increased in this pandemic		
a) Yes	72.7	84.2
b) No	5.2	5.3
c) Sometimes	22.1	10.5
Are you worried about getting infected with SARS- CoV-2		
a) Yes	64.3	77.6
b) No	10.4	6.6
c) Sometimes	25.3	15.8
Are you afraid of post Covid-19 future?		
a) Yes	65.6	80.9
b) No	14.3	6.6
c) Sometimes	20.1	12.5
Time spent to relax		
a) Increased	46.8	16.4
b) Decreased	32.5	66.5
c) Same as before	20.8	17.1

population during the COVID-19 pandemic. [31]

Interestingly, In our finding, almost, similar results was found. Mean percentage of facing stress & anxiety related variables was 64.9(Yes). While in the other hand, mean percentage of psychological support related variables was found to be 46.02.

Negative, psychological outcomes was observed in our study as, the majority of responded said, decreased in their ability or attitude regarding taking care of family members and their feelings. The overall score of participants indicates moderate stressful conditions, this might have triggered and aggravated due to increasing number of cases in India and news from various social media platforms and media

house regarding increasing deaths. Emerging news of death and increased cases or fear of getting infected might also have caused people to support their family members. An increased in 35.1% was recorded in case of family support. People were unable to pay attention toward mental health (54.1%) reported decreased. Moreover, the majority of participants responded decreased in support from friend, this might also, contributed in stress and degradation of their mental health. This can be correlated with previously published data that state 'psychological as moderate but higher than usual.

A significant decrease in time spend to relax is seen in our study, this might be associated with increase in stress and anxiety. Therefore, contributed on stressful situations.

The pandemic and lock down has brought the world to a standstill. Stress from pandemic can destroy the relationship and Bond among family members. Incidents of violence against women have increased worldwide since the lockdowns were implemented. [32]

In this study, a significant proportion of all participants (71.1%) emphasized their concerns about contracting COVID-19 most of the time, while 20.3% of total marked their concerns sometimes, Similarly, previously published studies are in agreement with us with regarding data.

Alternatively, an increased in financial and family stress in a disaster could be associate with increase in expenses, loss of jobs, or unemployment, or even may be as result of some change in behaviour & lifestyle.

In addition, compulsory quarantine, woke from home, school suspension, and stoppages of Nonessential service, might have also migrated the risk of psychological wear and tear. Subsequently, decreasing the quality of life (QoL).

Similarly, in analysis of Psychological impact of COVID-19 pandemic in the Philippines, the results was found to be similar, psychological impact of the outbreak was reported as moderate to severe (16.3%), 16.9% reported moderate to severe depression, while anxiety level was found to be moderate to severe (28.8%) & 14.4 % had moderate to serve stress level. [29] Summarized form of previously published data is given in table number 7.

In our research we were able to establish links between unemployment, stress, anxiety also highlighted possible reason and speculation of female being more vulnerable for stress, anxiety in pandemic situation. A proper attention and care taking is needed in order to coup current situation. We only studies pandemic implications on mental health of adult population but some published research suggests, children and adolescent were not spared from negative impact of pandemic, and behaviour changes due to school shutdown and isolation faced by them. In the other hand, children engaged in some method of social distancing, like motivation and awareness about social distancing, change in attitude of surroundings, altered attention, and change in eating habits and daily routine them to anxiety, depression

and feelings of aloneness and Belongingness and might have also, contributed feeling helpless and anxiety. [33]

5. Limitations

Despite of several strength of our research, we're also touched by limitations. Firstly, Our study were limited to English-speaking population and those who were able to assess internet or had smartphone. We couldn't get the idea and opinion of people of ruler area and uneducated. We utilized online Google forms for data collection that hindrance the participation of a larger section of the Population. Also, demographic variations was also limited, the majority of the participants were students and were more open to social media platforms and its negative news. In our study we collected the data about employability, but didn't have information about the natural of work i.e. Profession and their expense capacity (earnings). Secondly, sample size were small.

6. Conclusion

The COVID-19 pandemic was associated with moderate to severe stressful impact in our sample; Since data were collected at a time when cases were on peaks in India. So, fear, stress and anxiety is natural. The research finding indicate that in Indian population, people should be more concerns towards mental health and also should pay attention toward their friends and family in fighting against this new pandemic. Psychological support to our near and dear can be quite helpful and can contribute in a positive manner. Our study managed to capture some immediate positive and negative mental health impacts of the COVID-19 pandemic. Our study has also suggested some important future research areas to assess the impact of the COVID-19 pandemic. We suggest that, since the COVID-19 pandemic is still ongoing, these findings need to be confirmed and investigated in future larger population. Finally, at last policymakers should be more concerns in developing a positive attitude. Appropriate policy and its proper implementation is always mandatory.

7. Source of Funding

None.

8. Conflicts of Interest

There are no conflicts of interest.

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Author biography

Sourya Kumar, Resident ⓘD https://orcid.org/0000-0001-7974-3410

Shubham Kr Gupta , 3rd Year Student