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Impact of COVID-19 pandemic on the mental health status among general masses: An in-deep analysis of the worst "hitters" of COVID-19 pandemic

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Abstract:

BACKGROUND: A plethora of studies have reported the adverse psychiatric outcomes among the general masses during the COVID-19 pandemic; however, not much data is available in relation to the Indian population from this perspective. The aim of the present study was to investigate the impact of the COVID-19 pandemic on the mental health status among the general masses in the Indian population.

MATERIALS AND METHODS: The present study was planned in a cross-sectional study design between July 2020 and October 2021 in which a well-structured questionnaire, consisting of questions assessing the sociodemographic profile, while, also, specific questions related to the stress and anxiety-related variables, was used. The questionnaire was validated through intra-class correlation with a strong correlation of 0.84. The Chi-square test was used for statistical analysis to test the association between the studied variables, while $P < 0.05$ was considered statistically significant.

RESULTS: On comparison between the male and female participants using stress and anxiety-related variables, 43.81% of males as against 56.19% of the female participants reported that they felt horrified due to the pandemic with the results being statistically highly significant ($P = 0.0043$). Similarly, 45.18% of male and 54.82% of female participants expressed apprehension due to the fear of the pandemic with the results being statistically significant ($P = 0.0217$).

CONCLUSION: The research findings of the present study indicated that men and women responded to stress differently, with women experiencing greater sadness and anxiety and were found to be at a relatively greater risk for developing anxiety and depression than men.

Keywords:

Anxiety, COVID-19 pandemic, depression, mental health, post-traumatic stress disorder, SARS-CoV-2

Introduction

A case of viral pneumonia was reported in the Wuhan province of China on Dec 31st, 2019 by the 'Wuhan Municipal Health Commission'. Later, on Jan 3rd, 2020, it was diagnosed as 'viral pneumonia of unknown origin', while after a week of its initial outbreak, it was identified as a novel coronavirus (n-CoV) responsible for causing

coronavirus disease-19 (COVID-19).^[1,2] Finally, on March 11th, 2020, the World Health Organization (WHO) declared COVID-19 as a pandemic since different countries across the globe reported surging numbers of COVID-19 cases. By Oct 2nd, 2020, the pandemic had infected a total of 34,375,469 people and had been responsible for causing the death of more than 1 million people across the globe. Furthermore, WHO designated the

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outbreak as a public health emergency of international concern from Jan 30th, 2020, till May 5th, 2023.^[3-5] A phase-adjusted estimation of the epidemic dynamics projected the effective reproduction number (R0) in the early stage of epidemic as 3.1 which was comparably higher than the COVID-19 infections seen in the past including the severe acute respiratory syndrome (SARS), and the Middle East respiratory syndrome (MERS).^[6] Experts predicted that coronavirus had low pathogenicity, though, possessed high transmissibility. The virus mainly spread via droplets but transmission through direct contact and fecal-oral route was, also, considered a possibility.^[7] The first case of COVID-19 in India was reported on January 30th, 2020 in the state of Kerala, which was followed by a rapid splurge of cases across the country due to which the Government of India called for a nationwide lockdown on Mar 24th, 2020.^[8,9] The sudden outbreak of the pandemic, and subsequent, period of lockdown, and official quarantines, created an atmosphere of fear and sudden panic, and this resulted in severe psychological breakdown among the general masses.^[10] Similar reports were published from various parts across the globe including the report published by Li *et al.*^[11] which suggested an increase in negative psychological effects and symptoms of anxiety and depression due to the COVID-19 outbreak among college-going students in China. The most common reason for this was the fear of getting infected with the virus/disease even at the time when no known signs of the disease were present.^[12] Also, severe disruption of the daily schedule, separation from family members on being infected, fear of death, and socio-economic insecurities (loss of jobs, lack of the fulfillment of basic needs of day-to-day life), etc., were the major factors that further pushed the general masses toward a deteriorating mental health and anxiety and depression issues.^[13] Similar trends of psychological deterioration were observed after the 2014–2016 Ebola virus outbreak, wherein symptoms of post-traumatic stress disorder (PTSD) were observed in the general masses of Western Africa even after one year of the epidemic.^[14] This was further confirmed in yet another report published by O’Leary *et al.*^[15] which accepted the mental health impact of the 2014–2016 Ebola epidemic in Western Africa. Almost similar concerns were raised in the reports published by Wang *et al.*^[16] and Ping *et al.*^[17] on the mental health status of the general population during the COVID-19 epidemic in China wherein the situation was found to be even worse among the people from older age groups, the ones suffering from chronic diseases, and those who belonged to the lower socio-economic strata. To date, there are many published reports that recorded what the causative virus (SARSCoV2) did to our body; however, there are limited to no reports that provide insight on what were its impact on the psychological/mental health status among the general masses. The present study was planned in an attempt to fill this gap and aimed to investigate the

impact of the COVID-19 pandemic on the mental health status among the general masses in the Indian population.

Materials and Methods

Study design and settings

The present study was planned in a cross-sectional study design between July 2020 and October 2021 in which only adult population of Indian nationality, and currently dwelling in India, and those who were well-versed with English language, and were willing to participate in the study, were recruited for the study.

Study participants and sampling

The study participants were recruited for the study using convenience sampling, also, known as opportunity or availability sampling, while the people who expressed their unwillingness to participate were excluded from the study.

Data collection tool and technique

For the present study, a Google forum was created, while a well-structured questionnaire composed of closed-ended questions was formulated and validated through intra-class correlation with a strong correlation of 0.84. The participants were contacted in all possible and available ways, while the online survey link was circulated through various social media platforms. The questionnaire used in the study consisted of questions assessing the socio-demographic profile of the participants including questions on age/gender, educational qualification, status of employment, and marital status of the participants, while, also, specific questions related to the stress and anxiety-related variables, and family and social support-related variables, including the health status, contact history, and the COVID-19 knowledge and concerns as expressed by the participants, in addition to the precautionary measures, and information needs of the participants. Also, psychological impact and mental health status were assessed by the Impact of Event Scale-Revised (IES-R), and the Depression, Anxiety, and Stress Scale (DASS-21), respectively,^[16] for which the participants provided suitable answers based on their experiences from the options provided. Furthermore, in order to maintain social distancing and the other standard operating procedures (SOPs) issued by Government, face-to-face or direct contact was avoided. A total of 440 participants were contacted in the present study, out of which 345 participants (78.41%) responded by filling up the questionnaire provided, while 40 participants (11.59%) responded, but were unable to provide complete details or, had filled their questionnaire incompletely were excluded from the study.

Formula used to calculate sample size:

Single Proportion - Absolute Precision

Expected Proportion = 0.727 (72.70%)

Precision (%) =5

Desired confidence level (%) =95

Sample size (n) =305 needed

Formula:

$$n = \frac{Z^2 pq}{d^2}$$

where, Z = Standard normal variate value (Z = 1.96 at 5% alpha error)

d = Margin of error = 5%

P = 72.70%, q = 100-72.70

Statistical analysis used

The data obtained was entered into spreadsheets and analyzed using Statistical Package for Social Sciences (SPSS) version 21.0 (IBM, Chicago). For statistical analysis, Chi-square test was used to test the association between the studied variables, while $P < 0.05$ was considered statistically significant.

Ethical considerations

The present study was planned as a cross-sectional study in which the privacy of the participants was duly taken care of, while all the precautions were kept in place to ensure the anonymity of the participants/data. Once the users clicked the link provided related to the questionnaire, they were provided information regarding the aim and nature of the study. Additionally, written, informed consent was obtained from all the participants ensuring that the personal details of the participants would be kept confidential, while ethical clearance was obtained from the Institutional Ethics Committee. Letter approval no. SDDC/IEC/01-49-2020 prior to the initiation of the study protocol.

Results

Table 1 provides the demographic variables of the participants (n = 305) wherein the mean age (in years) came-out to be 27.64, while 73.77% (n = 225) of the participants were found to be in the age group of 20–30 years. Also, no significant difference was observed in terms of age among the male and female participants (P = 0.5247) [Table 2]. Furthermore, the findings of the present study implied a high level of education among the participants with the majority of participants either being graduates (52.13%) in

different streams or undergraduates/university-going students (33.11%). Only 1.96% of participants reported below class 12. A notable finding in the present study was that 71.15% of participants were single, while in terms of the status of employment, only 20.33% of participants were engaged in full-time employment. On the other hand, 50.82% of participants were students, while a large number of participants (21.97%) were found to be unemployed in the present study. On demographic comparison between male and female participants in terms of the status of employment, 67.74% of male participants were found to be in full-time employment as against 32.26% in the case of female participants, while this fraction just got reversed in the case of percentage of participants being from the

Table 1: Demographic variables of the respondents (n=305)

Demographic variable	Number (n)	Percentage
Age (in years)		
Mean age		27.64
Academic qualification		
Postgraduate	45	14.75
Graduate	159	52.13
Undergraduate	101	33.11
Employment status		
Full-time	62	20.33
Part-time	21	6.89
Unemployed	67	21.97
Student	155	50.82
Marital status		
Married	85	27.87
Single	217	71.15
Divorced	3	0.98

Table 2: Demographic comparison between male and female respondents (n=305)

Demographic variable	Male		Female		Total		P
	n	%	n	%	n	%	
Age (in years)							
Mean age	28.10		27.18		27.64		0.5247
Maximum age	62.00		58.00		60.00		
Minimum age	18.00		18.00		18.00		
Academic qualification							
Postgraduate	24	53.33	21	46.67	45	14.75	0.3340
Graduate	73	45.91	86	54.09	159	52.13	
Undergraduate	56	55.45	45	44.55	101	33.11	
Employment status							
Full-time	42	67.74	20	32.26	62	20.33	0.0023*
Part-time	11	52.38	10	47.62	21	6.89	
Unemployed	23	34.33	44	65.67	67	21.97	
Student	77	49.68	78	50.32	155	50.82	
Marital status							
Married	34	40.0	51	60.0	85	27.87	0.0674
Single	118	54.38	99	45.62	217	71.15	
Divorced	1	33.33	2	66.67	3	0.98	

*P<0.05 - statistically significant

unemployed status with the corresponding percentage for male and female participants being 34.33% and 65.67%, respectively, with the results being statistically significant ($P = 0.0023$) [Table 2]. On further analysis, the findings of the present study suggest that 48.20% of participants had work-related stress, while an even larger fraction (64.26%) had stress related to financial concerns [Table 3]. Furthermore, 49.51% of participants were facing stress related to personal concerns, which was the third most common cause of anxiety and stress after work-related stress and stress related to financial concerns [Table 3]. A shocking revelation that was made based on the findings of the present study was that around 68.85% of participants felt horrified, while 64.59% of participants expressed apprehension due to the fear of the pandemic. Also, 66.23% of participants accepted that they felt helpless due to the sudden pandemic situation and were clueless about the security of their lives and future [Table 3]. On comparison between male and female participants using stress and anxiety-related variables, such types of concerns were more commonly seen in female participants compared to male counterparts, while the results were found to be statistically significant. In a similar context, 43.81% of male participants reported that they felt horrified due to the pandemic with similar concern being expressed by 56.19% of female participants with the results being statistically highly significant ($P = 0.0043$) [Table 4].

Table 3: Stress and anxiety-related variables of the respondents (n=305)/Negative impact on mental health of the respondents (n=305) using variables related to stress and anxiety

Variable	Number (n)	Percentage
Facing work-related stress		
a) Yes	147	48.20
b) No	77	25.25
c) Sometimes	81	26.56
Facing stress related to financial concerns		
a) Yes	196	64.26
b) No	55	18.03
c) Sometimes	54	17.70
Facing stress related to personal concerns		
a) Yes	151	49.51
b) No	78	25.57
c) Sometimes	76	24.92
Feel horrified due to COVID-19		
a) Yes	210	68.85
b) No	39	12.79
c) Sometimes	56	18.36
Feel apprehensive due to COVID-19		
a) Yes	197	64.59
b) No	46	15.08
c) Sometimes	62	20.33
Feel helpless due to COVID-19		
a) Yes	202	66.23
b) No	58	19.02
c) Sometimes	45	14.75

Table 4: Comparison between male and female respondents (n=305) using variables related to stress and anxiety

Variable	Male		Female		Total		χ^2	P
	n	%	n	%	n	%		
Facing work-related stress								
a) Yes	77	52.38	70	47.62	147	48.20	0.4859	0.7843
b) No	37	48.05	40	51.95	77	25.25		
c) Sometimes	40	49.38	41	50.62	81	26.56		
Facing stress related to financial concerns								
a) Yes	102	52.04	94	47.96	196	64.26	3.4445	0.1786
b) No	30	54.55	25	45.45	55	18.03		
c) Sometimes	21	38.89	33	61.11	54	17.70		
Facing stress related to personal concerns								
a) Yes	82	54.30	69	45.70	151	49.51	2.0512	0.3585
b) No	36	46.15	42	53.85	78	25.57		
c) Sometimes	35	46.05	41	53.95	76	24.92		
Feel horrified due to COVID-19								
a) Yes	92	43.81	118	56.19	210	68.85	10.8899	0.0043*
b) No	25	64.10	14	35.90	39	12.79		
c) Sometimes	36	64.29	20	35.71	56	18.36		
Feel apprehensive due to COVID-19								
a) Yes	89	45.18	108	54.82	197	64.59	7.6526	0.0217*
b) No	31	67.39	15	32.61	46	15.08		
c) Sometimes	33	53.23	29	46.77	62	20.33		
Feel helpless due to COVID-19								
a) Yes	89	44.06	113	55.94	202	66.23	9.5724	0.0083*
b) No	34	58.62	24	41.38	58	19.02		
c) Sometimes	30	66.67	15	33.33	45	14.75		

* $P < 0.05$ - statistically significant

Similarly, 45.18% of male, and 54.82% of female participants expressed apprehension due to the fear of pandemic with the results being statistically significant ($P = 0.0217$). Likewise, 44.06% of male, as against 55.94% of female participants accepted that they felt helpless due to the sudden pandemic situation, and the results were found to be statistically significant in this case ($P = 0.0083$) as well [Table 4]. Table 5 shows changes in the psychological support system observed by the participants ($n = 305$) from friends and family members wherein 53.11% and 28.85% of participants reported decreased support from the friends and family members respectively which was an actual source of

Table 5: Changes in the family and social support system observed by the respondents ($n=305$)/ Changes in the psychological support system observed by the respondents ($n=305$) from friends and family members

Variable	Number (n)	Percentage
Getting psychological support from friends		
a) Increased	44	14.43
b) Decreased	162	53.11
c) Same as before	99	32.46
Getting support from family members		
a) Increased	107	35.08
b) Decreased	88	28.85
c) Same as before	110	36.07
Are you able to take proper care of your family members and their feelings		
a) Increased	100	32.79
b) Decreased	133	43.61
c) Same as before	72	23.61
Are you able to pay attention to your mental health?		
a) Increased	79	25.90
b) Decreased	165	54.10
c) Same as before	61	20.0
Are you worried as the number of infected population is getting increased in this pandemic?		
a) Yes	239	78.36
b) No	16	5.25
c) Sometimes	50	16.39
Are you worried about getting infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)?		
a) Yes	216	70.82
b) No	26	8.52
c) Sometimes	63	20.66
Are you afraid of the post-COVID-19 future?		
a) Yes	223	73.11
b) No	32	10.49
c) Sometimes	50	16.39
Time spent to relax		
a) Increased	97	31.80
b) Decreased	150	49.18
c) Same as before	58	19.02

concern. Similarly, 43.61% of participants accepted that they were unable to take proper care of their family members and their feelings, while an even larger number of participants (54.10%) admitted that they were not able to pay attention to their own mental health. Furthermore, 78.36% of participants expressed their worry as the number of infected population was getting increased in the pandemic, while 73.11% of participants were afraid of the post-COVID-19 future due to loss of jobs and increasing financial insecurity [Table 5]. On further comparison using variables related to changes in the psychological support system from friends and family members in terms of male and female participants, all such concerns were found to be unequivocally more commonly seen in female compared to male participants, with the results being statistically significant to statistically highly significant [Table 6].

Discussion

Evidence suggested a prevalence of adverse psychiatric outcomes among the general masses during the COVID-19 pandemic, though, not much data was available on the psychological impact this pandemic carried on the general masses in the Indian population. The present study was planned in an attempt to fill this gap and aimed to investigate the impact of the COVID-19 pandemic on the mental health status among the general masses in the Indian population. In a similar context, a systematic review published by Xiong *et al.*^[18] indicated a high prevalence of symptoms of stress (8.1–81.9%), anxiety (6.33–50.9%), depression (14.6–48.3%), post-traumatic stress disorder (PTSD) (7–53.8%), and psychological distress (34.43–38%) among the general population in China, Spain, Italy, Iran, US, Turkey, Nepal, and Denmark during the COVID-19 pandemic. The findings of the present study as well were found to be in accordance with the data from the mentioned countries, though, some striking revelations made in the present study needed immediate attention and resolution of the concerns.

An interesting finding in the present study was that 73.77% ($n = 225$) of participants were found to be in the age group of 20–30 years making the implications of the study results more inclined toward the younger population. Also, the results of the present study suggest that females are at three times higher risk of developing stress and anxiety compared to their male counterparts. These gender differences in psychological distress including anxiety and depression have been described previously as well. Several studies conducted in the past have demonstrated that females are at an increased risk for developing mental illness wherein women have been reported to have a 1.7-fold greater incidence of depression compared with men.^[19,20] In a similar

Table 6: Comparison between male and female respondents (n=305) using variables related to changes in the psychological support system from friends and family members

Variable	Male		Female		Total		χ^2	P
	n	%	n	%	n	%		
Getting psychological support from friends								
a) Increased	28	63.64	16	36.36	44	14.43	4.7512	0.0929
b) Decreased	73	45.06	89	54.94	162	53.11		
c) Same as before	53	53.54	46	46.46	99	32.46		
Getting support from family members								
a) Increased	63	58.88	44	41.12	107	35.08	11.5783	0.0030*
b) Decreased	31	35.23	57	64.77	88	28.85		
c) Same as before	60	54.55	50	45.45	110	36.07		
Are you able to take proper care of your family members and their feelings?								
a) Increased	63	63.0	37	37.0	100	32.79	19.1913	0.0001**
b) Decreased	48	36.09	85	63.91	133	43.61		
c) Same as before	43	59.72	29	40.28	72	23.61		
Are you able to pay attention to your mental health?								
a) Increased	55	69.62	24	30.38	79	25.90	20.8627	0.0001**
b) Decreased	64	38.79	101	61.21	165	54.10		
c) Same as before	35	57.38	26	42.62	61	20.0		
Are you worried as the number of infected population is increasing in this pandemic								
a) Yes	111	46.44	128	53.56	239	78.36	7.6860	0.0214*
b) No	8	50.0	8	50.0	16	5.25		
c) Sometimes	34	68.0	16	32.0	50	16.39		
Are you worried about getting infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)								
a) Yes	98	45.37	118	54.63	216	70.82	6.8027	0.0333*
b) No	16	61.54	10	38.46	26	8.52		
c) Sometimes	39	61.90	24	38.10	63	20.66		
Are you afraid of post-COVID-19 future								
a) Yes	100	44.84	123	55.16	223	73.11	9.7490	0.0076*
b) No	22	68.75	10	31.25	32	10.49		
c) Sometimes	31	62.0	19	38.0	50	16.39		
Time spent to relax								
a) Increased	72	74.23	25	25.77	97	31.80	40.6077	0.0001**
b) Decreased	50	33.33	100	66.67	150	49.18		
c) Same as before	32	55.17	26	44.83	58	19.02		

*P<0.05 - statistically significant; *P<0.001 - statistically highly significant

context, Chaplin *et al.*^[21] conducted a study to assess gender-related divergence in the vulnerability posed for stress-related disorders and observed women being at greater risk for developing anxiety and depression, while men showing greater integration of reward motivation and emotional stress systems including an increased risk for alcohol-abuse disorders.

Again, education plays an important role in this, with being aware of the consequences of any situation making the more educated people less affected, as compared to the uneducated or less educated masses. The findings of the present study implied a high level of education among the research participants with the majority of participants either being graduates (52.13%) in different streams or undergraduates/university-going students (33.11%),

while in terms of the status of employment, only 20.33% of participants were engaged in full-time employment in the present study. On the other hand, 50.82% of participants were students, while a large number of participants (21.97%) were found to be unemployed in the present study. Interestingly, keeping students in the category of unemployed, the unemployed graph increased to 72.79% in the present study, with this being one of the greatest risk factors for developing stress, anxiety, and depression, and likely to have substantial impact on the research findings of the present study.

Also, unemployment is a potential situational stressor and has been linked to increased stress, anxiety, and other mental health issues including depression at least for a shorter duration of time.^[22] Its possible long-term

impacts, often referred to as “scarring effects,” have been understudied, possibly, leading to the underestimation of the magnitude of mental health burden that young adult unemployment generates.^[23] During the COVID-19 pandemic as well, several reports were published stating a constant decrease in the rate of employment, while this contributed substantially to create a situation of anxiety and depression among the masses, especially, the younger Indian population. Similar conclusions were drawn in a report published in Germany by Bauer and Weber.^[24] On further analysis, the findings of the present study suggested 48.20% of participants have work-related stress, while an even larger fraction (64.26%) had stress related to financial concerns, which might be explained on the basis of increasing loss of jobs on the work front with consequent financial instability among the masses during the lockdown. On the contrary, people in the high-income group and those from higher socio-economic strata were found to be associated with a significantly lesser impact on their psychological/mental well-being during the pandemic. In a similar context, in a report published by Gopalan and Misra,^[25] the authors highlighted the significance of firm economic measures while concluding that all National Health Programs should be re-strengthened with increased efforts that are more focused on the population belonging to the lower socioeconomic strata.

A shocking revelation made in the present study was that around 68.85% of participants felt horrified, while 64.59% of participants expressed apprehension due to the fear of the pandemic in the present study. Also, 66.23% of participants accepted that they felt helpless due to the sudden pandemic situation and were clueless about the security of their lives and future. The trauma of finding themselves or, their loved ones testing positive or, dying due to this “previously unseen COVID-19” had created fear among the masses with some media reports stating that several cases were reported in the country where people committed and/or, attempted suicide because they were scared of getting infected or, were worried about their future.^[26] A similar report published by the “Carers Trust,” also, stated that 59% of young adult carers accepted that their mental health was worse, while 74% felt stressed due to the COVID-19 pandemic. Also, 67% of young carers and 78% of young adult carers expressed concern about their future since the outbreak of the COVID-19 pandemic with a steep decline in their mental health.^[27] The findings of the present study, thus, suggested that the policymakers should be more concerned with developing a positive mindset/attitude among the people, while the government should lay more emphasis on implementing policies for increasing awareness of mental health-related issues among the people, with possible up-gradation of the infrastructure and addressing issues pertaining not only

to infrastructure lack but also rising unemployment to combat any such situation in the future.

Again, 53.11% and 28.85% of participants reported decreased psychological support from friends and family, respectively during the pandemic in the present study, which was an actual cause of concern. Similarly, 43.61% of participants accepted that they were unable to take proper care of their family members and their feelings, while an even larger number of participants (54.10%) admitted that they were not able to pay attention to their own mental health. The recent pandemic and lockdown situation had brought the world to a standstill, while successive phases of lockdown and self-home quarantine forced people to be isolated with an always persisting, unwanted fear of getting infected with the deadly virus. The lockdown/quarantine measures instituted in many countries, also, increased a kind of risk within the families since as a result of the pandemic, much, if not all, of the support given to the families who provided care for an ill parent, partner or, child was lost. In similar context, a report published by Tandon R.^[28] suggested a worldwide increase in incidents of violence against women during the period of lockdown.

This, too, had a negative impact on the mental well-being of children since they were not supposed to leave their house during the pandemic, while school closures created a family environment wherein the children were confronted by the vulnerabilities of a family member’s addiction, aggression, and/or violence.^[29] In this context, a report published by Singh *et al.*,^[30] also, highlighted the short-term and long-term psychosocial and mental health implications of the COVID-19 pandemic and subsequent lockdowns for the children and young adolescents concluding with the need for an effective planning, and further longitudinal and developmental studies to arrive at an evidence-based elaborative plan of action to cater to the psychosocial and mental health needs of vulnerable children and adolescents during, as well as, in the post-pandemic times.

Notably, all these concerns were found to be more common in female participants as far as the results of the present study were concerned. Indeed, an increase in financial and family stress in a disaster could be associated with an increase in expenses, loss of jobs, unemployment, or even a result of changes in behavior and lifestyle of the people. In addition, compulsory quarantine, work from home, suspension of school, and other academic and non-academic activities, and stoppages of non-essential services, might, also, have contributed to the increased risk of psychological wear and tear among the people during pandemic. Similar conclusions were drawn in a report published by Tee *et al.*^[31] wherein the authors suggested the need for

effective psychological support strategies to combat any such situations arising during a pandemic.

Limitations and recommendations

The present study did have certain defined limitations; foremost among them, being the reach of the study, which was restricted to people who could access the internet and various other social media platforms. This obviously excluded people who were from rural backgrounds and who either had a language constraint or, had no access to or, sufficient knowledge to access social media platforms. Also, the demographic variations of the study participants were more inclined toward the younger population, and participants who were more aware/exposed to social media platforms and their negative news regarding the pandemic and its consequences, having a strong psychological modulation of the study participants.

Conclusions

The research findings of the present study indicated that men and women responded to stress differently, with women experiencing greater sadness and anxiety, and were found to be at a relatively greater risk for developing anxiety and depression than men. Also, unemployment and stress related to financial concerns were found to be the major predisposing risk factors for developing anxiety and depression, both in the male and female participants. The present study, thus, raised some important questions that mandate further research in this area to assess the long-term impact of the pandemic in the coming years, and the possible ways to deal with it.

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Conflicts of interest

There are no conflicts of interest.

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