COVID-19 AND MENTAL HEALTH

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Abstract
Background: COVID-19 pandemic poses a unique medical challenge to the humanity in last few months. The psychological impact of the pandemic itself and the lockdown in particular is likely to be very huge. Aim: To assess the psychological impact of COVID-19 pandemic on general population in Uttar Pradesh. Materials and Methods: An online questionnaire using google forms was sent to a sample of general population in July 2020. Filling of the forms was entirely independent of any compulsions. A 27- self-designed questionnaire was used for the study. Total 500 responses were received by the stipulated time. Results: A largest percentage of the respondents felt more worried and depressed, in the past few weeks. (24%) of the respondents were thinking of getting themselves tested for COVID-19 without having any symptoms. Majority (77%) of the respondents were worried about the financial loss they were facing during the period of lockdown. (86%) and (48%) of the respondents found that this pandemic had made their existence very difficult due to which they are still adjusting themselves to the ‘new normal’ routine, respectively. Conclusion: This pandemic has created a threat to everyone’s existence to a great extent and affected their mental condition negatively, including their sleep cycle and had made them more worried and depressed.

Keywords: Corona virus, general population, mental condition, psychological impact, anxiety

Introduction
The corona virus infection or COVID-19 outbreak is one of the biggest medical challenges to human kind in current time. The outbreak of COVID-19 infection started in Wuhan City, Hubei Province, China [1]. It was initially reported to the WHO on December 31, 2019. It has spread to almost all the countries of the world by January–March 2020 [2]. COVID-19 has been declared as a pandemic in March, 2020, by World Health Organization (WHO). In India, cases of COVID-19 started to rise by the end week of March 2020, with a reach of up to 1559 cases reported with 49 deaths [3]. A sense of panic has set among the general population that has aided by the increasing number of positive cases with each passing day and months now. Central government and state governments had issued advisory to the people for maintaining social distancing to stop the community spread. Earlier which was not taken seriously, but now this is something that has become an important part of our life. Preventing the public from moving from one area to another, a strong step was taken as emergency protocol and termed it as ‘LOCKDOWN’. In this phase, all factories, offices, local markets, educational institutions, shopping centres, transport vehicles, airports, railways, metros, buses, etc., are completely shut down, except medical centres, police stations, fire station, petrol pumps, and groceries. Though this lockdown has proved itself to be significant and effective strategy of social distancing to tackle the increasing spread of the highly infectious COVID-19 virus, but at the same time, it has created a degree of psychological impact on the public.

COVID-19 pandemic provides a chance to study the psychological impact of a condition, caused by this highly infectious illness, leading to a physical and psychological distress in a person. Hence this study aimed to assess the psychological impact on general population during this pandemic.
Aim of the Study
To evaluate the psychological impact of COVID-19 pandemic on the general population of Uttar Pradesh.

Materials and Methods
A structured, self-administered questionnaire was used. The questions were created on google form and the link was shared on WhatsApp and email ids. First circulated on July 1, 2020, and kept open for responses till July 31, 2020. Total 500 responses were received by this stipulated time. This survey invitation is totally on participants consent.

Inclusion Criteria
Any gender (preferably above 20 years to 60 years)

Instrument Used
1. Self-designed questionnaire: A 27-item self-designed questionnaire was used for the purpose of the study. The questionnaire included questions in three sections:
   a) sociodemographic profile of the respondents
   b) knowledge and attitudes towards COVID-19 pandemic; and
   c) psychological impact of COVID-19 pandemic

Results
A typical respondent was male (76%), graduate (60%), in private job (48%), belonged to Hindu religion (92%), and hailed from urban locality (61%) [Table 1]. Full number of respondents heard about COVID-19 (100%) and knew what COVID-19 exactly was (99%). Majority (990.6%) of the respondents recognized the symptoms of COVID-19, e.g., fever, cough, shortness of breath, and sneezing; however, none recognized myalgia or body aches and pains as one of the symptoms. Near about (62%) of the respondents enumerated the options to stop COVID-19, by social distancing, hand washing following cough etiquette, and wearing mask. Majority of the respondents were supportive of government’s decision of lockdown (96%) [Table 2].

A major amount (99%) of the respondents did not come in direct contact with COVID-19 patients, and only a very smallest (0.8%) percentage of respondents had confirmed COVID-19 patients in their locality. Only 2% of the respondents were associated with care of suspected or confirmed COVID-19 patients [Table 3].

Near about (77%) and (91%) of the respondents felt more worried and depressed, respectively, in the past few weeks. (24%) of the respondents were repeatedly thinking of getting themselves tested for the presence of COVID-19 despite having no symptoms. Minority of the respondents kept checking their fever with thermometer repeatedly (10%) and visited doctor (12%) on multiple occasions to rule out the symptom of COVID-19 to be sure that their health was normal in the past few weeks. More than half (62%) of the respondents reported of having disturbed sleep-wake cycle in the past few weeks.

(22%) of the respondents were taking hydroxychloroquine as a prophylaxis for COVID-19 as advised by the ICMR. A worrying fact was (75%) of the respondents were taking the drug without any doctor’s advice. Majority of the respondents were worried more than usual about their own future as well as future of their family members (63%) and worried about the financial loss they were incurring during the period of lockdown (77%). More than half (67%) of the respondents got very depressed and worried, after reading COVID-19-related news on social media, which was less meaningful and more a myth or a rumour. (38%) of the respondents were spending their time by doing household chores or working from home (22%). Only a minority of the respondents took help of psychiatry helpline (10%), started on antidepressant or anti-anxiety drugs in the past few weeks (6%), and was taking sleeping pills (2%) for the past few weeks. Majority (86%) of the respondents found that COVID-19 pandemic had affected their existence and they found it difficult to adjust to the new routine during lockdown period, [Table 3].
Table 2: Knowledge and attitude of the respondents towards coronavirus disease 19 pandemic (n = 500)

| Variables                                                                 | n (%)         |
|---------------------------------------------------------------------------|---------------|
| Have you heard about Covid–19 pandemic?                                  |               |
| Yes                                                                       | 500 (100%)    |
| No                                                                        | Nil           |
| What is COVID-19?                                                        |               |
| Bacterial disease                                                        | 3 (0.6%)      |
| Severe flu-like illness caused by (nCoV/SARS)                            | 495 (99%)     |
| Disease caused by protozoa                                               | 2 (0.4%)      |
| What are the symptoms of COVID-19?                                       |               |
| Fever                                                                    | 15 (3%)       |
| Cough                                                                    | 10 (2%)       |
| Body aches and Shortness of breath                                      | 10 (2%)       |
| Sneezing                                                                 | 12 (2.4%)     |
| All of the above                                                         | 453 (90.6%)   |
| What are the options to stop this pandemic?                              |               |
| Social distancing                                                       | 110 (22%)     |
| Hand washing                                                             | 20 (4%)       |
| Cough etiquette                                                          | 10 (2%)       |
| Wearing mask                                                             | 50 (10%)      |
| All of the above                                                         | 310 (62%)     |
| Are you in support of government’s decision lockdown?                    |               |
| Yes                                                                      | 480 (96%)     |
| No                                                                       | 15 (3%)       |
| May be                                                                   | 5 (1%)        |

Table 3: Psychological impact of the pandemic on the respondents (n = 500)

| Variables                                                                 | n (%)         |
|---------------------------------------------------------------------------|---------------|
| Have you come in direct contact with any COVID-19 patient?                |               |
| Yes                                                                       | 5 (1%)        |
| No                                                                        | 497 (99%)     |
| Are you associated with the care of any suspected/confirmed COVID-19 patients? |           |
| Yes                                                                       | 2 (0.4%)      |
| No                                                                        | 498 (99.6%)   |
| Any confirmed COVID-19 case in your locality?                            |               |
| Yes                                                                       | 4 (0.8%)      |
| No                                                                        | 496 (99.2%)   |
| Are you feeling worried more than usual in the last few weeks?           |               |
| Yes                                                                       | 385 (77%)     |
| No                                                                        | 115 (23%)     |
| Are you repeatedly thinking of getting yourself tested for the presence of COVID-19 (without any symptom) |           |
| Yes                                                                       | 120 (24%)     |
| No                                                                        | 380 (76%)     |
| Have your sleep-cycle changed in the past few weeks?                     |               |
| Yes                                                                       | 310 (62%)     |
| No                                                                        | 290 (38%)     |
| Do you keep checking for fever with thermometer repeatedly in the past few weeks? |               |
| Yes                                                                       | 50 (10%)      |
| No                                                                        | 450 (90%)     |
| Have you visited any doctor(s) on multiple times to rule out any symptoms of COVID-19? |           |
| Yes                                                                       | 60 (12%)      |
| No                                                                        | 440 (88%)     |
| Are you taking hydroxychloroquine (as advised by ICMR)                   |               |
| Yes                                                                       | 110 (22%)     |
| No                                                                        | 390 (78%)     |
| If the answer to the above question is “yes,” are you taking it through doctor’s prescription? |         |
| Yes                                                                       | 125 (25%)     |
| No, on my own                                                            | 375 (75%)     |
| Are you feeling depressed for most of the time regarding the pandemic?   |               |
| Yes                                                                       | 455 (91%)     |
| No                                                                        | 45 (9%)       |
| Are you worried more than usual about the future of yourself and family members in past few weeks? |           |
| Yes                                                                       | 315 (63%)     |
| No                                                                        | 185 (37%)     |
| Are you worried about the financial loss that you are facing in this period? |               |
| Yes                                                                       | 385 (77%)     |
| No                                                                        | 115 (23%)     |
Do you get more depressed after reading the news on social media (WhatsApp or Facebook) related to COVID-19?

| Yes         | 335 (67%) |
|-------------|-----------|
| No          | 165 (33%) |

How are you spending time during the lockdown?

| Reading books | 45 (9%) |
| Watching movies | 30 (6) |
| Doing household chore | 190 (38%) |
| Laying/sleeping | 15 (3%) |
| Listening to music | 25 (5%) |
| Engaging in social media | 20 (4%) |
| Exercise/yoga | 60 (12%) |
| Work from home | 110 (22%) |
| Others | 5 (1%) |

Have you taken the help of psychiatry helpline to reduce your anxiety or depression during the past few weeks?

| Yes | 10 (2%) |
| No  | 490 (98%) |

Are you on any antidepressant(s)/anti-anxiety medication

| Yes | 30 (6%) |
| No  | 470 (94%) |

Are you taking any sleep medication for the past few weeks?

| Yes | 10 (2%) |
| No  | 490 (98%) |

Are you feels like suffocating/ any anxiety attack?

| Yes | 30 (6%) |
| No  | 470 (94%) |

How do you think COVID-19 pandemic has affected your mental status?

| Has affected me to some extent | 50 (10%) |
| Has affected me to a great extent | 430 (86%) |
| Has not affected me at all | 20 (4%) |

Have you find it difficult to adjust to the new routine during the lockdown period?

| Yes | 240 (48%) |
| No  | 260 (52%) |

have you adjusted yourself according to the ‘new normal’?

| Yes | 259 (51.8%) |
| No  | 241 (48.2%) |

Discussion

Index survey is unique in the sense that it assessed the psychological impact of COVID-19 on general population in Uttar Pradesh a few months after the cases started to rise in India from the 2nd week of March 2020 and the central government came up with the first advisory [4], making it compulsory for all passengers coming from other country/state to quarantine themselves for 14 days. As this report is being written, we are almost in the 4th month of lockdown period. The total number of confirmed COVID-19 cases is 585493 and 23492, as on 1st July, 2020 for India and Uttar Pradesh, respectively [2, 5]. It has taken away almost 17400 lives all over India and 697 in Uttar Pradesh. This study is in a manner to look into the psychological impact of this exceptional situation on general population. The demographic data showed that majority of the respondents were male, living in urban areas, well-educated and were in private jobs.

This survey consciously made an attempt to keep the healthcare professional out of the ambit, but still near about (12%) were health-care providers. Here, people responded to questionnaire are well aware of what COVID-19 is, its symptoms and preventive measures, to be followed to stop the spread. This shows that public health awareness is spreading in general population in a right manner. Majority of the showed positive response towards the decision of lockdown. This showed that general people were somewhere somehow are ready to sacrifice their personal for the public benefit. Though sacrificing their personal agendas, almost every respondents felt more and more depressed in the past few weeks. Few of the respondents were continuously thinking of themselves getting tested for this infectious disease, without having any symptoms. Considering the highly contagious nature of the disease, this particular finding was of little shocking. More than half of the respondents reported of having disturbed sleep in the past few weeks. Some of the respondents were taking hydroxychloroquine as a prophylactic drug for COVID-19 as advised by the ICMR. This has many adverse effects6, one of them being QTc prolongation, which in predisposed individuals may give rise to Torsades De Pointes and death. A maximum of the respondents were worried more than usual about their own future as well as future of their family members and worried about the financial loss they were facing during this lockdown, because majority of the respondents were in private sectors, the situation of facing loss in the past few weeks. Some of the respondents were taking hydroxychloroquine as a prophylactic drug for COVID-19 as advised by the ICMR. This has many adverse effects6, one of them being QTc prolongation, which in predisposed individuals may give rise to Torsades De Pointes and death. A maximum of the respondents were worried more than usual about their own future as well as future of their family members and worried about the financial loss they were facing during this lockdown, because majority of the respondents were in private sectors, the situation of facing loss in their job is a big reason to worry for. Almost a big part of the respondents got more depressed and worried, after reading COVID-19-related news on social media platform. Since last few weeks, social media is being attacked with lots and lots of unfavourable news related to this current worst scenario like per day thousands of new cases, deaths, ignominious of the cases, lots of rumours and fake news of new cases in the locality. This gave rise to undesirable thoughts amongst all.

There have been initiatives taken by different Health Department in overall India, for the benefit of general public, to help them overcome through this emotional distress through dedicated helpline. But a very little number of the respondents (2%) took help through the helpline. Les number of the respondents said that COVID-19 pandemic had affected
their mental status to some extent, but a large number of respondent felt their life have been affected in a greater extent and they found it difficult to adjust to the ‘new normal’ routine during lockdown period. This overall statement hence shows the fact that the current situation has been quite disruptive in terms of emotional and mental health of the general population concerned and required adjustment on part of them to get themselves adjusted to new routine during the lockdown period.

Conclusion
COVID-19 pandemic poses an exceptional medical challenge to the mankind. The measures to contain the spread of the disease have been heretofore unseen to many of us. This study was done to assess the psychological impact of the pandemic, while it was still at peak; in which what has increased more is stress and worry with less sleep. The pandemic has affected the existence of the respondents to a great extent and along with negatively disturbing their mental status.

But for now and for many more months, we have to spend our life like this; wearing mask for long, hand sanitization, distancing from people where all needed. What we can do apart from these must do things is to try divert our mind by improving our skills, can do yoga/exercises, by spending time with family and making a big gap from fake news, rumours.

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