ORIGINAL ARTICLE

Psychological Impact of COVID-19 Pandemic among General Population in Rajasthan: A study

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ABSTRACT

Background: The pestilent and infectious nature of COVID-19 pandemic pose a unique medical challenge to the humanity in recent times. In the absence of an effective counter measure, imposition of mass lockdown seems to be the only way, but possess an undesirable side effect of posing a negative psychological impact among general population.

Aim: To assess the psychological impact of COVID-19 pandemic on general population in Rajasthan after one and half month of unlock from nationwide mass lockdown.

Materials and Method: It was an online survey, conducted using Google Forms via a link sent through Whatsapp. The questionnaire used for the study was self-designed and tailor made according to the study requirements. A total of 200 responses were received during the stipulated cut off time.

Results: Near about one fourth (25.7%) of the respondents reported as having disturbed sleep-wake cycle in the past five months. Majority of the respondents were worried more than usual about future of themselves and their family members (61.4%) and were worried about the financial loss that incurred during the period of lockdown (52.5%). Majority (52.9%) of the respondents agreed that COVID-19 pandemic had affected their mental status to some extent. One third (37.9%) and two-fifth (39.2%) of respondents found that COVID-19 pandemic had threatened their existence and they found it difficult to adjust to the new routine during 21-day lockdown period, respectively.

Conclusion: The index survey suggested that worry and sleep disturbances were common in respondents after one and half months of unlock but less than what happened at the start of pandemic. The pandemic had threatened the existence of respondents to greater extent but now respondents were starting to get adapted to a "new normal".

Keywords: COVID-19, Lockdown, Psychological Impact

INTRODUCTION

The corona virus infection or COVID-19 outbreak is one of the biggest medical challenges to mankind in recent times. The outbreak of COVID-19 infection started in China in December 2019 and spread to almost all the countries of the world by January–February 2020[1].

The World Health Organization (WHO) declared COVID-19 as a pandemic on March 11, 2020 and cases are still on a rise in the world[1].

In India, cases of COVID-19 started to rise by the 2nd week of March 2020, and by March 31, 2020, more than 1,356 cases were reported with 46 deaths[2]. Now according to India COVID-19 Tracker (last updated 31 July 2020) confirmed cases are nearly 16 lakh 43 thousand with 5 lakh 50 thousand active cases and 35 thousand 8 hundred deaths.

The spread of corona virus infection occurs by droplet transmission. For prevention of spread of this deadly disease" lockdown" was the only available practical and implementable strategy. The Prime Minister of India declared "Lockdown" for 21 days on 25th March 2020 which was further extended with relaxations till 31st May 2020 in phases. "Lockdown" was an emergency protocol, which basically means preventing public from moving from one area to the other hence restricting the citizens from coming outside and help in maintenance of

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social distancing. In this scenario, all educational institutions, shopping arcades, factories, offices, local markets, transport vehicles, airports, railways, metros, buses, etc., were completely shutdown except emergency services such as hospitals, police stations, fire stations, petrol pumps, groceries stores and stores catering eatables. Moreover, the lockdown provided ever so precious time for the administration to arrange for proper beds including ICU beds and other medical facilities such as drugs, ventilators etc. Since there was a lack of effective drugs & vaccines against novel corona virus, the lockdown provided time for development of these. Also, the lockdown has delayed the peak of COVID-19 case load. While lockdown can serve as an effective strategy for prevention of corona virus infection it can have some degree of psychological impact on public. It is well known that quarantine/isolation for any cause are associated with significant mental health problems ranging from anxiety, fear, depressive symptoms, sense of loneliness, sleep disturbances, anger, etc in immediate few days of isolation followed by symptoms of post traumatic stress disorder and depression even after 3-4 weeks of discharge[3].These symptoms were also reported during Pandemic caused by SARS in 2003.

After initiation of step by step unlock of the lockdown by the administration, movement of general public has been restored to near normal although with a rise in the number of new cases. A sense of panic has set in among the general population alarmed by the increasing number of positive cases with each passing day and by the rumours & myths about COVID-19 that are being circulated on social media platforms. COVID-19 poses a serious threat as a contagious illness, as a threat to physical and psychological integrity of a person and in the long run, has a potential of causing huge socioeconomic impact[4].

Aim of the study-The aim of the present study is to look into the psychological impact of COVID-19 pandemic and the administrative measure of "lockdown" on general population after five months of the COVID-19 outbreak.

MATERIAL AND METHODS

An online survey was conducted using Google Forms via a link sent using whatssup. Google forms have an advantage of submitting responses anonymously and also it mitigates the need of physical contact with the persons to be surveyed thus ensures social distancing. The investigators can only see the responses but not the name of the person who sent it. The link was first circulated on 20.07.2020 at 22:16:11 IST and kept open for responses till 01.08. 2020 at 10:28:21 IST. Daily reminder was sent. The survey invitation clearly stated that the participants will have the right, not to participate in the survey and participation in the survey will imply their consent. The survey questionnaire normally took around 5-7 min to complete. A total of 200 responses were received by the stipulated cut-off time

Inclusion and exclusion criteria

The participants with age more than 20 years of both gender who were capable of reading and understand English, had internet connection and whatsapp installed on their phone, were included for the study. Participants who were unwilling to respond to survey were excluded from the study.

Tool used

A self designed tailor made questionnaire was used for the purpose of the study. The questionnaire included questions about sociodemographic profile of the respondents and psychological impact of COVID-19 pandemic on the respondents

Statistical analysis

Descriptive analysis was done and results were expressed in terms of numbers and percentage.

Table 1: Sociodemographic profile of the respondents

Variables **Percentage** (number of responders)

Age (years)	
20-30	9.3% (19)
30-40	22.1% (44)
40-50	40.2% (80)
50-60	15.2% (30)
60-70	8.8% (18)
70-80	4.4% (9)
Gender	
Male	47% (94)
Female	53% (106)
Profession	
Health care provider	39.1% (78)
Home maker	13.7% (28)
Banking sector	10.7% (22)
Teacher	8.6% (17)
Businessman	11.2% (22)
Student	4.2%(8)
Private job	6.4%(13)
Others	6.1%(12)

Level of education	
10th pass	2.4% (5)
12th pass	4.4%(9)
Graduate	26.6% (53)
Postgraduate	61.1% (122)
Post doctoral	5.5% (11)
Residence	
Urban	60.6% (121)
Metrocity	28.6% (57)
Semiurban	8.8% (18)
Rural	2% (4)

Table 2: Psychological impact of corona virus disease 2019 pandemic on the respondents

Variables	% (n)
Are you worried more than usual in last four months Yes No	70.8% (142) 29.2% (58)
Are you preoccupied with idea of contracting COVID-19 during past four months Yes No	50%(100) 50% (100)
Are you repeatedly thinking of getting yourself tested for presence of COVID -19 in your body (although you have no symptoms) Yes No	14.4% (29) 85.6% (171)
Have your sleep cycle become disturbed in past four months Yes No	25.7% (51) 74.3%(149)
Do you keep checking for fever with thermometer repeatedly in past four months Yes No	13.9%(28) 86.1% (172)
Have you visited doctor on multiple occasions to rule out the symptoms of COVID-19 in past four months Yes No	3% (6) 97%(194)
Are you afraid of testing COVID-19 Yes No	25.9%(51) 74.1%(149)
Are you checking daily details about COVID-19 spread Yes No	68.7% (137) 31.3% (63)
Are you worried more than usual about future of yourself and family members in past four months Yes No	61.4%(123) 38.6% (77)
Have you become more irritable than usual in past four months Yes No	33.2%(66) 66.8% (134)
Are you worried about the financial loss that are incurring to you during period of lockdown Yes No	52.5%(115) 47.5% (85)
Have you done routine blood tests in past three months to be sure that your health is OK Yes No	11.9% (24) 88.1%(176)
Do you get more depressed after reading the whatsapp or facebook messages related to COVID-19 in past four months Yes No	34.7%(69) 65.3%(131)
Do you get more worried after reading the whatsapp or facebook messages related to COVID-19 in past four months Yes No	48.5%(97) 51.5%(103)
How are you spending time during lockdown Doing household chores Watching movies Work from home Reading books Others	38.7%(77) 15.6%(31) 27.6%(55) 8.5%(17) 9.6%(20)
Have you taken the help of psychiatry helpline to reduce your anxiety and depression during last four months Yes No	3.5%(7) 96.5% (193)
Are you on any antidepressents/ antianxiety medications which has been started in past four months Yes No	2.5% (5) 97.5%(195)
Are you taking any sleep medication for past four months Yes No	2.5%(5) 97.5%(195)
How do you think COVID-19 pandemic has affected your mental status negatively Has affected me to great extent Has affected me to some extent Has not affected me at all	5.4%(11) 52.9% (106) 41.7%(83)
Do you find that COVID-19 pandemic has posed a threat to your existence Yes No	37.9%(76) 62.1%(124)
Do you found it difficult to adjust to new routine during lockdown period Yes No	39.2%(78) 60.8%(122)

RESULTS

71.6% of the respondents were below 50 years of age with majority of them falling in the age group of 40-50 years (40.2%), 39.1% respondents were health care providers, 61.1% were postgraduates and 60.6% were from urban locality.

Near about seven-tenth (70.8%) of the respondents felt worried in past four months which is more than what is considered to be the normal prevalence of worry in the community. Near about one-third (33.2%) of the respondents had a history of irritability in the past four months. Half of the respondents (50%) were preoccupied with the idea of contracting COVID-19 and one-seventh (14.4%) of the respondents repeatedly had a thought of getting themselves tested for the presence of COVID-19 despite having no symptoms. Relatively fewer respondents kept checking their fever with thermometer repeatedly (13.9%) and visited doctor on multiple occasions (3%) to rule out the symptom of COVID-19 and underwent routine blood tests (11.9%) to ensure that their health was normal in past three months. Nearly one fourth (25.7%) of the respondents reported having a disturbed sleep-wake cycle. Majority of the respondents (61.4%) were worried more than usual about their future and future of their family members and 52.5% were worried about the financial loss that incurred during the period of lockdown. One-third (34.7%) and half (51.5%) of the respondents got more depressed and worried, respectively after reading COVID-19 related news on social media. Majority of the respondents were spending time during lockdown either performing house-hold chores (38.7%) or working from home (27.6%). Only a minority of the respondents took help from Psychiatry helpline (3.5%). Among these, 2.5% were put on antidepressant and/or anti-anxiety drugs in the past four months and 2.5% reported consumption of sleeping pills for past five months. Majority (52.9%) of the respondents found that COVID-19 pandemic had an effect on their mental status to some extent. One third (37.9%) and two-fifth (39.2%) of respondents found that COVID-19 pandemic had threatened their existence and found it difficult to adjust to the new routine during 21-day lockdown period (25 March to 31st May), respectively.

DISCUSSION

The present survey assessed the psychological impact of COVID-19 on general population in Rajasthan nearly four months after 1st case was registered in India. Nationwide Lockdown in India was enforced from 25th March 2020 and extended till 31st May 2020. Step wise Unlock was initiated from 1st June 2020 and the present survey was done using Google Forms in the state of Rajasthan after nearly one and half month of unlock.

Sociodemographic profile of the study participants suggested that majority of respondents were well educated, living in urban setting and were 40-50 years of age. 85.6% of respondents admitted that they were not thinking for getting themselves tested for the presence of COVID-19 without overt symptoms suggestive of the disease. This finding correlated with a similar observation obtained in a previous study[4]. The probable explanation to this might be the fear of contracting the disease and the ever so toilsome quarantine measures recommended by the administration along with pervasive social stigmata associated with diagnosis of COVID-19. In our study 13.9% of respondents kept checking for fever with a thermometer repeatedly in comparison to 9.7% respondents doing so as per a previous study[4]. As per the present study, 3% of respondents reported visiting doctor on multiple occasions for ensuring ruling out the symptoms of COVID-19 in comparison to a figure of 1.6% as reported in a previous study[4]. 11.9% of respondent underwent routine blood tests in past four months to assess their health status in comparison to 3.4% in previous study[4]. The above observations suggest an increase in awareness about COVID -19 among general population emanating possibly due to plethora of information available to them through various media platforms in due course of time. An increased trend of opting elective blood investigations by the respondents might also be attributed to the fact that a large proportion of respondents comprised of health care providers who supposedly had an easy access to the health care facilities and(or) were more vigilant about their health. On one hand, the respondents showed a higher tendency of going for blood investigations while on the other hand, demonstrated a strikingly low interest in opting for COVID-19 tests, like RT-PCR, indirectly implying a probable fear of quarantine measures and social stigma associated with being labelled as COVID-19 positive even among the health care providers.

61.4% respondents were worried more than usual either for their own future or future of their family in comparison to 71.8% participants reporting so in previous study[4]. 33.2% became more irritable than usual in past

four months in comparison to 37.1% in previous study[4]. 52.5% worried about financial loss during lockdown period in comparison to 69.6% in previous study[4]. This had been probably resulted since majority of respondents were health care providers and persons with businesses/occupations dependent on normal socioeconomic backdrop comprised a small group of respondents. Since salaries of healthcare workers were unfazed during the pandemic, their financial condition was less affected in lockdown period and hence resulting in lesser worries.

65.3% and 51.5% of respondents did not get depressed and worried after reading the Whatsapp or Facebook messages related to COVID-19 in past four months respectively in comparison to a correspondingly 45.2% and 34.7% participants in previous study[4]. The apparent difference might have been resulted possibly due to the timing of the survey wherein the previous study was conducted during the lockdown and the present survey underwent during a phase when unlock protocols are in practice by and large. Despite a steady rise in number of cases, the stress level has declined in the minds of people as exemplified by having 52.9% of respondents with a notion that COVID-19 pandemic had affected their mental status negatively to some extent in comparison to 64.9% participants having similar thoughts in previous study[4]. The prevalence of negative emotions in the study was found to be higher in comparison and might be the knee jerk reaction to the plethora of fake news related to COVID-19 circulating on social media. However 62.1% respondents in the present study did not find/acknowledged COVID-19 pandemic as a threat to their existence in comparison to 33.9% in previous study as majority of the respondents were from the fraternity of health care providers and were well educated and adapted to COVID-19 pandemic.

CONCLUSION

COVID-19 pandemic has created a setting of extraordinary socioeconomic and psychological challenge to mankind. The effect of COVID-19 pandemic has a propensity to last very long and the present survey was done to the observe effect of COVID-19 pandemic on psychological wellbeing of mankind. The survey indicated that worry and sleep disturbances were common among respondents even after one and half months of unlock. The pandemic had threatened the existence of respondents to a greater extent but now respondents were starting to get adapted to a new normal.

Future direction

Future studies with large sample size should be done to assess the psychological impact of COVID-19 on larger population which can represent whole India. Similar studies can also be done on frontline health care workers, COVID-19 survivors, policemen and caregivers.

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