



PSYCHOLOGICAL IMPACT OF COVID-19 LOCKDOWN IN INDIA

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Abstract

COVID-19 pandemic has affected the world not only as medical disorder but also in psychologically. As a part of a preventive strategy, in India a nationwide lockdown was announced by government in March 2020. This study aims to evaluate psychological symptoms and coping methods in people under COVID-19 government lockdown. We used demographic variables, corona related behaviour and Diagnostic and Statistical Manual of Diseases Fifth Edition (DSM V) Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult among 37 subjects. We observed that majority of the subjects had depression, anxiety, anger, sleep problems and repetitive thoughts and behaviours. Female subjects were more affected than males. Students, using social media and post graduated subjects had high scores on most of the psychological domains. Those under lockdown for 15 days or more, doctor by profession were affected more with depression, anxiety and sleep problems. Music, drawing, spending time with family and reading helps to lower the psychological distress. COVID-19 has not only taken a toll by deaths, but its psychological impact on survivors and families is a long lasting one.

Keywords: COVID-19 lockdown, mental health, psychological impact, DSM V

INTRODUCTION

With the beginning of 2020, the world has encountered one of the greatest challenges to mankind in the form of COVID-19 or the Corona Virus Disease 2019. It emerged in Wuhan, China between December 2019 and early 2020, and then globally the cases were reported. WHO announced the Novel Corona virus Pneumonia of China as a Public Health Emergency of International Concern (PHEIC). The rapid spread of the disease has not only affected the physical health, but also mental health of the community. Human to human transmission has made the scenario worse; for which WHO recommends social distancing, self isolation and home or hospital quarantine as preventive measures. Willingly or unwillingly,

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human beings have been trapped in this situation. In India too, as a part of preventive measure, government announced a country-wide lockdown for 20 days in late March 2020 (UN news, March 2020). Apart from essential services, all of the offices, shops, malls, small factories, etc have been under this effect. The nation was at a standstill. A country wide home stay was implemented. This situation for was sudden and most of people never imagined that they had to be home bound for a considerable duration.

Mental health and epidemic outbreaks have been widely studied. De Roo A et al. (1998); Shultz J M et al. (2016); Tsuruta K et al, Wu K K et al. (2005) have reported about psychiatric disorders like anxiety, depression and Post Traumatic Stress Disorder (PTSD) associated with outbreaks of diseases like SARS, Ebola and Legionnaires Disease in different parts of the world respectively. A recent study by Liu N et al. (2020) also suggest that in China, a midst of COVID -19 outbreak, there was high prevalence of post traumatic stress symptoms in the domains of re-experiencing, negative alterations in cognition or mood, and hyperarousal. The challenges and stress experienced by health care workers like doctors, nurses, paramedical staff, etc could trigger common mental disorders which in turn could result in hazards that exceed the consequences of the COVID-19 epidemic itself (Bao et al 2020).

OBJECTIVE AND HYPOTHESES

This study aims to evaluate psychological symptoms and coping methods in people under COVID-19 government lockdown in India.

METHOD

A total 37 subjects were considered for study through an online questionnaire through email and social networking over a period of 20 days in March 2020. An informed consent was taken prior to the questionnaire about the confidentiality. Subjects, who agreed for the consent, involve in selfie practices and regularly using internet was considered for the study. Questionnaire included the following

1. **Demographic profile:** Age, Sex, Education, Occupation were considered under this set of questions.

2. **Corona related information :** questions like duration of complete stay at home i.e. self isolation, any known person having COVID-19, Government quarantine duration to self and family, main source of information about COVID-19, preventive measures taken at personal level and coping methods during lockdown were included.

3. **Diagnostic and Statistical Manual of Diseases Fifth Edition (DSM V) Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult:** This is a self- or

informant-rated measure that assesses mental health domains that are important across psychiatric diagnoses. This adult version of the measure consists of 23 questions that assess 13 psychiatric domains, including depression, anger, mania, anxiety, somatic symptoms, suicidal ideation, psychosis, sleep problems, memory, repetitive thoughts and behaviours, dissociation, personality functioning, and substance use. Each item inquires about how much (or how often) the individual has been bothered by the specific symptom during the past 2 weeks. Each item on the measure is rated on a 5-point scale (0=none or not at all; 1=slight or rare, less than a day or two; 2=mild or several days; 3=moderate or more than half the days; and 4=severe or nearly every day). The measure was found to be clinically useful and to have good test-retest reliability in the DSM-5 Field Trials that were conducted in adult clinical samples (Narrow et al. 2013).

RESULTS

Out of 37 participants, demographic variables are as shown in table 1; among which majority of the study subjects were of age 20 to 30 years, post graduation as education qualification and job going. We had almost equal number of male and female subjects.

Table 1 – Demographic variable distribution of study subjects (N=37).

Demographic variable		Number of subjects
Age	20 to 30	21
	31 to 40	11
	41 to 50	2
	more than 50	3
Sex	male	18
	female	19
Education qualification	under graduation	10
	post graduation	27
Occupation	doctor	11
	job	18
	business	4
	housewife	2
	student	2

Assessing the DSM-5 Level 1 Cross-Cutting Symptom Measure, 30% had some or other psychological symptoms. The self rating on severity of

psychological domains in past 2 weeks, 16% of subjects rated slight i.e. rare, less than a day or two and 3% of subjects rated severe i.e. nearly every day. Considering individual domains (as shown in Table 2), 63.5% had depression, 60.2% had anxiety, 45.9% had anger, 43.2% had sleep problems, 36.4% had personality functioning issues, 33.7% had mania and 27% had repetitive thoughts and behaviours. On further analysis, of individual domain severity, 10.6% rated depression to be severe and 11.3% rated anxiety to be severe and anger, sleep problems, mania and personality functioning to be mild to moderate in severity.

Table 2 – Percentage of Subjects (N=37) who scored on the domains on The DSM-5 Level 1 Cross-Cutting Symptom Measure

Psychological Domain	Average score of responses with Slight to Severe rating on scale	Percentage	Average score of responses with None rating on scale	Percentage
Depression	23.5	63.5	13.5	36.4
Anger	17	45.9	20	54.0
Mania	12.5	33.7	24.5	66.2
Anxiety	14.7	60.2	22.3	39.8
Somatic Symptoms	8.5	22.9	28.5	77.0
Suicidal Ideation	6	16.2	31	83.7
Psychosis	4.5	12.1	32.5	87.8
Sleep Problems	16	43.2	21	56.7
Memory	9	24.3	28	75.6
Repetitive Thoughts And Behaviours	10	27.0	27	72.9
Dissociation	8	21.6	29	78.3
Personality Functioning	13.5	36.4	23.5	63.5
Substance Use	1.7	4.59	35.3	95.4

Also, 80.9% of subjects with age group 20 to 40 years had high scores on depression, 66.67% had anxiety, 61.9% had anger, 57% had sleep problems and 47.6% repetitive thoughts and behaviours. Age group 41 to 50 years had high scores on somatic symptoms. Scores of depression, anxiety, anger and somatic

symptoms in females were 89%, 79%, 74% and 32% respectively. 55.5% of male subjects had high scores on depression, 44% had anxiety, 44% had repetitive thoughts and behaviours and 37% had sleep problems. Education up to post graduation was associated with depression (66.7%), anxiety (70.3%), anger (55.5%) and sleep problems (37%). Students had majority of psychological domains present and job going subjects had depression and anxiety. Doctors who participated in studies had depression (73%), anxiety (69%) and sleep problems (45%). Most of the subjects had no issues on personality functioning, psychosis, memory and substance use domains.

Those subjects who were under 0 to 15 days of lockdown had higher depression (67%), anxiety (60%) and sleep problems (45%) as compared to others. Those who were under 6 to 10 days had anger (60%) and who were less than 11 to 15 days had somatic symptoms (66%). Social media usage for surfing of COVID-19 related information was associated with depression (82%), sleep problems (65%), anxiety (58%), anger (53%) and somatic symptoms (47%). Majority of subjects (98%) felt Government source of information published on newspaper, news channels on TV and mobile as well as social media government pages as authentic and true. Almost all the subjects (99%) knew the preventive measures against COVID-19 as recommended by Government authorities like washing hands for 20 seconds with soap, not shaking hands or physical touch people, sneeze or cough by covering your mouth with cloth or inside the shoulder, social distancing - avoid going out, moving in crowds, etc. As a part of everyday activities, those who did music, painting and drawing, reading and spending time with family were associated with lesser psychological symptoms (28 to 34%) than watching Web series and watching TV (55 to 59%).

DISCUSSION

Majority of the pandemics have associated with psychological symptoms during and after the outbreak whereas this study focuses on the psychological symptoms during lockdown days of COVID19 pandemic in India. The most common psychological symptoms reported in this research were depression and anxiety, which were reported by Wang C, Cao W, Qiu J et al (2020) and other studies in recent past De Roo A et al (1998); Shultz J M et al (2016); Tsuruta K et al and Wu K K et al (2005). This study also reports anger as a psychological response during lockdown and outbreak which is reported by Shigemura J et al (2020). Young people (18–30 years) were found to be more under psychological distress which were reported by studies from Wang C, Cao W, Qiu J et al (2020). Female subjects had depression, anxiety, anger and somatic symptoms as compared to male subjects, which are also reported by multiple studies (Liu, Wang, Qiu, Lai et al, 2020). Male subjects had repetitive thoughts and behaviours which are reported by past studies about obsession symptoms more common in males (Mathis

et al, 2011). Education up to post graduation was associated with more psychological issues probably because of high self-awareness of their health (Qiu et al, 2020; Roberts et al, 2018). Our frontline warriors (i.e. doctors, nurses, paramedical staff, etc) to COVID-19 are not spared to psychological symptoms. Lai J et al (2020) reports on mental health outcomes among healthcare workers considerable depression, anxiety and sleep problems as reported by doctors. Association of social media use and its psychological impact specifically in depression and sleep related problems have been reported by Lin L.Y et al and Levenson, J. C et al (2016). Specific up-to-date and accurate health information (e.g., treatment, local outbreak situation) and particular precautionary measures (e.g., hand hygiene, wearing a mask) were associated with a lower psychological impact of the outbreak (Wang et al, 2020). Music lowers depression levels (Miranda & Claes, 2009) and most subjects in this study doing music as an activity have low scores on depression and anxiety. Rutter M. (1999) found that spending a quality time with family is a kind of family therapy and integral component of resilience (relative resistance to psychosocial risk experiences), which can be done during the lockdown days very effectively; this study also reports similar findings.

CONCLUSION

COVID-19 has not only taken a toll across the world as far as medical disorder is concerned, but it has also challenged each one psychologically. The lockdown is a part of a preventive strategy to curb the spread of the disease and if not tackled well individually, it definitely makes one vulnerable to mental health problems. The future of COVID-19 pandemic is dicey and diffuse, but we as an individual have to take care of ourselves and family to stay physically and mentally fit.

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