

## Original Research Article

# The effect of lockdown due to COVID-19 on mentally ill patients and their caregivers: a cross sectional study

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### ABSTRACT

**Background:** Pandemics are known to cause poor mental well-being and an increased risk of mental disorders. The foremost concern emerging from different aspects of COVID-19 is its impact on mental health. There were many surveys conducted on the general population related to the effect of COVID-19 and few studies on its psychological impact but there is sparse literature on how the containment measures affected the psychiatric patients. Objective of the study was to investigate whether the COVID-19 related lockdown affected the subjective mood and behavior of psychiatric patients and their caregivers. The secondary purpose is to assess the difficulties encountered in procuring medicines and the effect of non-availability of homoeopathic medicines if any.

**Methods:** A cross-sectional survey was conducted on mentally ill patients and their care-givers in the Outpatient Department of Psychiatry in National Homoeopathy Research Institute in Mental Health (NHRIMH), Kottayam. Respondents were evaluated with a specially framed questionnaire containing 22 questions to assess the effect of lockdown on psychiatric patients and their caregivers, who attended the OPD after the COVID-19 related lockdown. The data generated through the study are analysed and presented in this article.

**Results:** Out of the total 548 participants (M-65.9%, F-34.1%) who responded to the survey, 290 (53%) cases expressed that they were distressed to be under lockdown. 26.5% of the clients reported worsening of mental health conditions during lockdown compared to pre-lockdown. 54.2% of the patients found difficulty in procuring homoeopathic medicines during Lockdown.

**Conclusions:** Authorities should consider the ways of limiting the effects of confinement on mentally ill patients and their caregivers by developing strategies to mitigate the adverse consequence of the pandemic.

**Keywords:** COVID-19, Caregivers, Homoeopathy, Psychiatric patients, Survey

### INTRODUCTION

COVID-19 outbreak, declared a Public Health Emergency of International Concern by the World Health Organization (WHO). Consequently, many countries including India imposed a lockdown of the population to restrict the spread of COVID-19 infection. These stringent containment measures have a positive impact on the physical aspect of the disease, but the impact of psychosocial issues has not been thoroughly addressed,

especially on the people affected with mental illness.<sup>1</sup> The largest COVID-19 national lockdown in the world has been seen in March, April, and May 2020. India's population of 1.3 billion across diverse states, health inequalities, widening economic, social disparities, and distinct cultural values present unique challenges. Preparedness and response to COVID-19 differed at the state level. The Kerala state has drawn on its experience with the Nipah virus in 2018 to use extensive testing, contact tracing, and community mobilization to contain

the virus and maintain a low mortality rate. Odisha's exposure to previous natural disasters meant crisis precautions were already in place and has been repurposed. Maharashtra has used drones to monitor social distancing at the time of lockdown and applied a cluster containment strategy.<sup>2</sup> With this strict lockdown, people become overreact to the situation and buying commodities needed without maintaining social distancing, when the Government orders are violated then it has to strictly enforce the law on the population to safeguard the lives of other people. Hence, the lockdown situation conveys that "Law is the only Medicine (Sec.144 of Cr.P.C.)".<sup>3</sup>

So lockdown is meant to prevent or delay the spread of infection from one person to another and constant bombarding of COVID-19 news from all over the world has instilled fear in society. It makes people anxious, panicky, and can even possibly do things that we might not consider appropriate under normal circumstances.<sup>4</sup>

COVID-19 created a huge effect on population mental health with an enormous impact on particular groups of individuals, including those with pre-existing mental illnesses may face newer challenges during self-isolation.<sup>5</sup> People with pre-existing mental health and substance use disorders are vulnerable to COVID-19 infection, increased risk of having problems accessing testing and treatment, and increased risk of negative physical and psychological effects stemming from the pandemic.<sup>6</sup>

They would also have similar fears and stress as others, which may worsen their previous or existing mental health condition. By social isolation, they may become more withdrawn, moody, and irritable. They may not seek or get easy access to medicines. Counseling help and support are vital for persons with mental illness from their families and other caregivers.<sup>4</sup>

A caregiver is an individual who has the responsibility of meeting the physical and psychological needs of the dependent patient. Psychiatric patients need assistance or supervision in their daily activities and this often places a major burden on their caregivers, this responsibility exposes the caregiver to an intense burden with negative consequences for themselves and the rest of the family, thereby placing the caregiver at great risk of mental and physical health problems.<sup>6,7</sup>

Stringent public health measures were implemented and there was a rapid surge in research in response to the outbreak of COVID-19.<sup>8</sup> Subsyndromal mental health problems were not an uncommon response to the COVID-19 pandemic. There is a need for more representative research, particularly in vulnerable populations such as mentally ill patients.<sup>9</sup> During the disruption in the lockdown phase, many psychiatric patients could not make out the consultation with their concerned physician for a longer period and some

patients are constrained to continue without medication. This study aims to investigate whether the COVID-19 threat and subsequent lockdown affected the subjective mood and behavior of psychiatric patients who were using institutionalized care.

## METHODS

A questionnaire was prepared in consultation with psychiatrist and the research team finalized the components of the domains after detailed deliberations. Because of the possibility of non-accessibility of electronic media to most of the psychiatric patients and their caregivers, it has been decided to conduct the survey manually on all psychiatric patients and their caregivers. The study was conducted on regular OPD in the Department of Psychiatry, National Homoeopathy Research Institute in Mental Health (NHRIMH), Kottayam, Kerala, India. The respondents were the Psychiatric patients and their caregivers, who attended the OPD after easing out of the COVID-19 related lockdown.

The questionnaire was developed containing 22 related questions to assess the effect of lockdown on Psychiatric patients and their caregivers. It includes the following components:

Demographic and personal characteristics: basic information, which included age, gender, marital status, and current work profile, the relation of the caregiver.

14 questions destined for mentally ill patients mainly covered their existing mental illness, difficulty in getting medication both allopathy and homeopathy, reactions to news through TV/social media, family relations during the lockdown and their habit of substance abuse and withdrawal, and how it affected one's mood, emotions, feelings, and behaviors in different aspects of life has been devised.

Caregivers have to respond to 8 questions that cover their emotional and mood changes, difficulties faced in managing mentally ill patients, support received, and general hygiene measures during COVID-19 time.

All the responses were recorded, except those who are not willing to participate in the survey both patients and their caregivers. Those who have poor insight have also been excluded. Designated doctors in the Psychiatry department were assigned to collect the data from the patients/caregivers during their follow-up visits. For those who cannot understand the language, the designated doctors make them understand to fill the form.

### Data collection

The duration of data collection was for 2 months (June and July 2020). After obtaining the filled survey form, the data collected and compiled in Excel sheet format.

Information collected from the survey form was rationally analyzed and evaluated for the results.

**Statistical analysis**

Data analysis was done Using SPSS software.

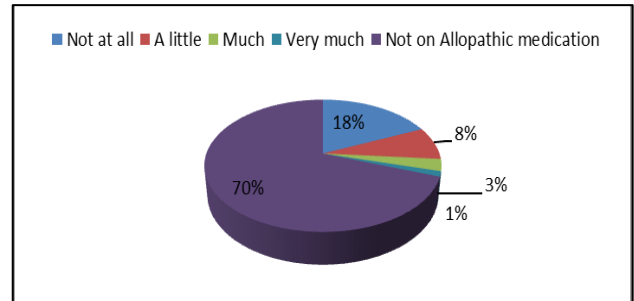
**RESULTS**

Out of 1358 patients who visited the outpatient department of NHRIMH during June and July month, 2020, the response rate was 41% i.e. 563 responses out of the visited patients. Excluded the responses of 15 patients due to identification error and have repeated responses in the questionnaire. Finally, 548 responses were considered for analysis, which was meeting all the criteria.

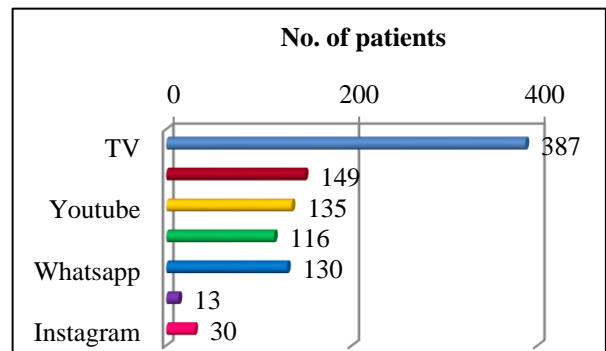
**Table 1: Demographic data.**

Variables	No. of patients (%) / Mean±SD
<b>Age (yrs)</b>	32.77±17.40
<b>Gender</b>	
M	361 (65.9)
F	187 (34.1)
<b>Marital status</b>	
Single	326 (59.5)
Married	213 (38.9)
Widowed	5 (0.9)
Separated	4 (0.7)
<b>Occupation of client</b>	
Self employed	76 (13.9)
Employed in Government	5 (0.9)
Employed in private set up	67 (12.2)
Home maker	83 (15.1)
Unemployed	134 (24.5)
Retired	13 (2.4)
Others	170 (31.0)
<b>Occupation of caregiver</b>	
Self employed	77 (14.1)
Employed in Govt.	36 (6.6)
Employed in private set up	60 (10.9)
Home maker	161 (29.4)
Unemployed	48 (8.8)
Retired	38 (6.9)
Others	70 (12.8)
Caregiver was not present	58 (10.6)
<b>Relation of caregiver with the client</b>	
Spouse	115 (21.0)
Son/ Daughter	37 (6.8)
Grandson	2 (0.4)
Parents	310 (56.6)
Grandparents	3 (0.6)
Siblings	22 (3.8)
Others	1 (0.2)
Caregiver was not present	58 (10.6)

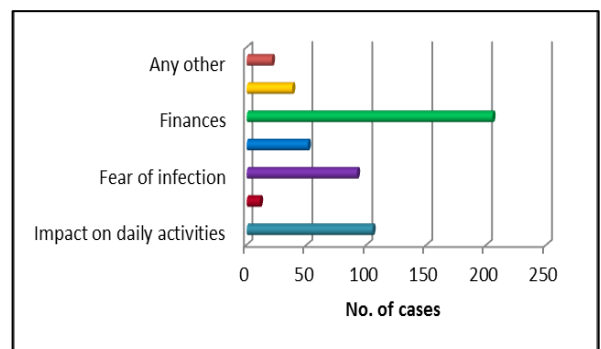
Demographic data of the patients and their caregivers have been presented in Table 1. In most of the cases; caregivers were parents (56.6%) or Spouse (21.0%). Caregivers were not present for 10.6% of cases; these were the cases with good insight. The mean duration of illness was 7.56±7.57 years.



**Figure 1: Difficulty in procuring allopathic medication during lock down by the patient and their caregiver.**



**Figure 2: Social media among psychiatric patients during lockdown.**



**Figure 3: Caregivers stress factors during lockdown.**

Out of the 548 cases, 290 (53%) cases expressed that they were distressed to be under lockdown. The mental health condition of 26.5% of the patients worsened during lockdown compared to pre-lockdown. 54.2% of the patients found difficulty in procuring homoeopathic medicines during Lockdown, whereas few patients i.e. 18% found difficulty in getting allopathic medication. 70% of the psychiatric patients were on only homoeopathic medications. Mental health condition of

271(50%) of the caregivers emotionally disturbed during lockdown compared to pre-lockdown. 205 (37.4%) caregivers could be unable to manage their finances, which was the major stress factor during the lockdown.

## DISCUSSION

### Age

Mean age for the psychiatric cases in this survey was 32.77, most patients were in the middle age group.

### Gender

Previous studies shows that females have more anxiety, mood disorders than males and males more externalizing substance disorders than women in all cohorts and countries.<sup>10</sup> This survey also shows affected males were 65.9% (n=361), whereas females were 34.1% (n=187), this skewing towards male gender could be because of the considerable number of male patients who are being treated at the Institute for Alcohol dependence.

### The occupation of the patient

Other jobs like assisting in a shop, servants in hotels, maids, etc. shows 31% (n=170). Unemployment among psychiatric patients also was on the higher side 24.5% (n=134), getting the other jobs to psychiatric patients is difficult, so the unemployment scores were on the higher side compared to other respectable jobs.

### The occupation of the caregiver

Usually mothers and wives use to come for the follow-up as an informant along with the psychiatric patients and these patients require constant care and monitoring so homemaker came up more prominently with 29.4% (n=161) compared to other occupations.

Study data shows, mean duration of illness were 7.56±7.57 years that the patients suffering from the psychiatric illness. This explains the nature of the psychiatric illness mostly chronic and what we saw in homoeopathy OPD, most psychiatric patients will visit after a few years of allopathic treatment.

### Stressors during lockdown

Previous studies suggest that patients with mental illness were four times more likely to perceive high COVID-19 pandemic related stress.<sup>11</sup> In this survey, psychiatric patients showed distress because of lockdown, 53% (n=290), whereas 47% (n=257) patients did not show any distress. Though the lockdown was distressing to the patient but worsening of their existing symptoms observed in 26.5% (n=145) patients and 65.5% (n=359) did not have any worsening of the symptoms. The minimum dose and repetition is a hallmark of homoeopathy and probably the long duration of action of

the minimum dose might have created such stability in their mental state. Compared to allopathic medications, homoeopathic medical stores are not widely available to procure medicines; hence, the patient/caregivers are constrained to visit the treating physician or nearby dispensary. During the lockdown due to the unavailability of the transport system, 54% (n=291) patients faced difficulty in visiting the hospital for procuring homoeopathic medicines, and 46% (n=251) patients did not face any difficulty. A flawless availability of homoeopathic medicines may help those in need of such restrained situations.

The data also throw light on the fact that 70% of psychiatric patients using homoeopathic treatment were on stand-alone therapy and were not on allopathic medication. This reflects the patient satisfaction on the usefulness of homoeopathy as a stand-alone treatment apart from the beneficial effect on giving as an adjuvant to psychotropic medicines, represented in Figure 1.

A systematic review of randomized placebo-controlled studies of homoeopathic treatments in psychiatry concluded that the database on studies of homeopathy and placebo in psychiatry is limited, but results do not preclude the possibility of some benefit.<sup>12</sup>

### Social media in lockdown

Compared to other social media, watching TV came to 70.6% (n = 387), it is easy and does not require much of the cognitive ability, so it was most preferred among psychiatry patients, represented in Figure 2. The chances of erroneous, alarmist and exaggerated information in social media can cause fear, stress, depression, and anxiety in people with or without underlying psychiatric illnesses.<sup>13</sup> It was not significant in this survey, 62.4% (n=342) patients responded that they were not at all affected by the COVID-19 news, hence not much change in their behavior due to the social media, only 19.9% (n=109) patient responded that they were getting irritable with the COVID-19 news in social media.

### Interpersonal relationships

Family relationships of these patients were not affected much 54.7% (n=300), conversely 20.3% of patients (n=111) showed improved relations. These are the stocks of patients who were happy to spend quality time with their family members, which were not otherwise possible. 13.1% (n=72) showed conflicts in the family, 3.3% (n=18) showed distance in relation, though it is negligible still we cannot deny the domestic violence 0.3% (n=3).

### Substance abuse during lockdown

Among all psychiatric patients, only 10.2% (n=56) patients responded currently using alcohol/toddy and 8.8 (n=48) patients using tobacco smoking, 0.7 (n=4) showed using other substances and the usage of these substances



for more than 8 years. Though the lockdown was restrictive, 6.6% (n=36) of patients responded that these substances were available to them. A small proportion of patients informed that they could not procure these substances; hence, they used other alternatives such as excessive coffee, vinegar, etc.

### Caregivers stress factors during lockdown

Caregivers of individuals having psychiatric illness are at greater risk of being subjected to mental health consequences such as depression, anxiety, and burnout.<sup>6</sup> Our survey also shows 50% (n=271) of caregivers suffered from emotional disturbances in this lockdown. However, when the question about their mood, 33.9% (n=186) of caregivers responded that their mood was cheerful, 26.7% (n=147) reported being sad, 21.7% (n=119) were anxious, 4.9% (n=27) suffered from anger and irritability. Previous studies show that caregivers experience enormous burden during providing care for their relatives with mental illness but this survey shows that 47% (n=257) caregivers did not feel that the psychiatric patient are a burden to them, 40% (n = 218) responded them as a burden during the lockdown.<sup>14</sup> An estimated 12.2 crore people have lost their job due to the COVID-19 pandemic, resulting in increased financial crisis<sup>15</sup>, in this survey, 37.4% (n=205) of caregivers responded managing finances was the major stress factor during the lockdown, represented in Figure 3.

33.4% (n=183) caregivers felt that due to the limited physical contact, the family relation during the lockdown got affected whereas patients showed improved family relationship as discussed above. Our data shows that 75% (n=409) of patients could maintain the social distance, mask, and hand washing measures so managing the COVID-19 guidelines among psychiatry patients was not a much problem.

Community support was hardly available for patients with mental illnesses and their caregivers and the society often has an ambivalent attitude rather than helping them unconditionally.<sup>16</sup> About 45.07% (n=247) of caregivers in this survey wanted support groups/moral support from society. The mental health professionals and society need to identify the needs of the caregivers, the stresses faced by them and introduce suitable interventions, to reduce the burden as well as help in developing healthy coping strategies.

### Limitations

Convincing the Psychiatric patients and caregivers to fill this questionnaire was a big challenge to us, patients with poor insight were not ready to accept that they are mentally ill, and hence were not willing to fill this questionnaire. Though it was only 22 questionnaire form, consumed a lot of time in making them understand and fill it up. This survey was conducted on all psychiatric

cases so evaluating stress factors in a particular disorder was difficult.

### CONCLUSION

Despite the global attention focused mainly on the distress of the general population, our findings reinforce the view that the current pandemic significantly affected the mental health of psychiatric patients and there is a need to perform longitudinal studies and plan strategies to enhance mental health services. Necessary measures should be taken to improve the accessibility of homoeopathic medicines to psychiatric patients along with institutional care.

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