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# COVID-19–Related Stigma Among Inpatients With COVID-19 Infection: A Cross-Sectional Study From India

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The coronavirus disease 2019 (COVID-19) pandemic has had a significant impact on global mental health. Studies<sup>1</sup> from across the world reported significant psychological distress associated with the COVID-19 pandemic among patients, health care workers, and the general population. Another significant public health issue reported during this pandemic was stigmatization.<sup>2–4</sup> Stigmatization of patients with infectious diseases served to reduce transmission of the particular disease in the past.<sup>5</sup> However, during the COVID-19 pandemic, stigma has actively increased the spread of the disease, as patients with COVID-19 or at-risk individuals avoided seeking health care to avoid being stigmatized.<sup>5</sup> There are many reports highlighting the stigma faced by COVID-19 survivors; many were isolated by their neighbors and labeled with tags such as *superspreader*.<sup>6</sup> However, there are only a few publications exploring stigma among COVID-19 patients.<sup>7–10</sup>

## Methods

This cross-sectional study was conducted at a COVID-19 treatment facility managed by public-private partnership in South India. The study was approved by the hospital's ethical committee. The study period was August 1, 2020, to September 30, 2020. Purposive sampling was used to recruit participants. Inclusion criteria were COVID-19 patients > 18 years of age who were clinically stable for the interview. Informed consent was received from all participants.

We developed a self-report instrument that measures COVID-19–related stigma among participants based on

**Table 1. Sociodemographic Stigma Variables**

Variable	n (%)
Sex	
Women	33 (58.9)
Men	23 (41.1)
Exposure	
Hospital exposure	5 (8.9)
Family and neighborhood	22 (39.3)
Unknown	29 (51.8)
COVID-19 symptoms	
Asymptomatic	29 (51.8)
Symptomatic	27 (48.2)
Comorbidities	
Yes	29 (51.8)
No	27 (48.2)
Stigma	
Yes	4 (7.1)
No	52 (92.9)

Abbreviation: COVID-19 = coronavirus disease 2019.

the Berger-HIV Stigma Scale (12-item short version).<sup>11</sup> The 12-item short version of the Berger-HIV Stigma Scale consists of the following subscales: personalized stigma (3 items,  $\alpha = 0.88$ ), disclosure concerns (3 items,  $\alpha = 0.84$ ), concerns about public attitudes (3 items,  $\alpha = 0.81$ ), and negative self-image (3 items,  $\alpha = 0.80$ ). The questionnaires consisted of 11 questions with response options on a 5-point Likert scale (shown in Supplementary Appendix 1). Responses were summed to calculate a total score, with a possible range of 0–44; higher scores indicate a higher level of stigma. The scale also assesses 4 aspects of stigma: personalized stigma, disclosure concerns, concerns about public attitudes, and negative self-image. Sociodemographic and clinical details were also collected using a structured proforma.

## Results

We received data from 56 COVID-19 patients during their hospital stay. The mean age of the sample was 46.02 years, and 58.9% were women. Of the patients, 29 (51.8%) had unknown exposure, 22 (39.3%) had exposure from family members and neighbors, and 5 (8.9%) had hospital exposure. More than half of the admitted patients were asymptomatic, and 29 (51.8%) had comorbid medical illnesses. Details of the patient sample are summarized in Table 1.

The mean  $\pm$  SD total stigma score was  $14.75 \pm 6.87$ . Four (7.1%) patients had a stigma score > 22, indicating significantly higher stigma. Among 4 domains of COVID-19 stigma, patients had significantly higher stigma in the

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**Table 2. Continuous Variables**

Variable	Mean (SD)
Age, y	46.02 (17.39)
Seroconversion in days	11.21 (2.56)
Personalized stigma	1.00 (1.31)
Disclosure concern	5.27 (1.91)
Concern about public attitude	6.07 (3.13)
Negative self-image	2.29 (2.45)
Total stigma score	14.75 (6.87)

domain of concern about public attitude ( $6.07 \pm 3.13$ ), and personalized stigma was relatively lower. Details are summarized in Table 2.

## Discussion

This the first study, to our knowledge, to report COVID-19–related stigma among COVID-19 inpatients in India. We found that 7.1% of the respondents had significantly higher stigma levels, and patients had significantly higher stigma in the domain of concern about public attitude. The study findings have clinical as well as policy implications. A recent study<sup>4</sup> from Vietnam explored stigma among people after quarantine and found higher-level stigma in the domains of negative self-image and concerns about public attitudes.

Stigma associated with similar infectious diseases has also been reported in the past, which caused negative consequences both for the individuals and society.<sup>12</sup> A study conducted during the severe acute respiratory syndrome (SARS) epidemic found significant stigma among survivors, and many reported that they were rejected for dining with friends or were refused household maintenance or home delivery services.<sup>13</sup> A significant proportion of the participants also reported that they were refused services at clinics and hotels, and their domestic helpers stopped working for them.<sup>13</sup> Of those employed, 48.7% perceived discriminating treatment by their employers.<sup>13</sup> A literature review<sup>14</sup> showed that a range of 63% to 100% of survivors of SARS and Ebola reported stigmatization after recovery. Moreover, another study<sup>15</sup> found that patients with lower stigma during SARS expressed more favorable attitudes toward government policies on prevention, public education, research, and antidiscrimination than patients with high stigma.

## Limitations

We adapted the 12-item short version of the Berger-HIV Stigma Scale to measure COVID-19–related stigma among COVID-19 patients, as there is no existing detailed or validated tool to assess for COVID-19–related stigma. We decided to use the Berger-HIV Stigma Scale because HIV/AIDS shares similar characteristics with COVID-19

in terms of social isolation, fear of contagion and family, and community stigma and discrimination.

## Conclusion

In conclusion, our study documented initial evidence regarding COVID-19–related stigma among patients. Further well conducted studies are needed to understand the societal impact of COVID-19 stigma on individuals and society. As communicable diseases will be a continuing threat in the future, a deep understanding of the interrelationship of disease-related stigma with the epidemic control measures will be important to plan future public health policy.

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Supplementary material follows this brief report.



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## **Supplementary Material**

**Article Title:** COVID-19–Related Stigma Among Inpatients With COVID-19 Infection:  
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### **List of Supplementary Material for the article**

[Appendix 1: The COVID-19 Stigma Scale for Patients](#)

### **Disclaimer**

This Supplementary Material has been provided by the author(s) as an enhancement to the published article. It has been approved by peer review; however, it has undergone neither editing nor formatting by in-house editorial staff. The material is presented in the manner supplied by the author.

Appendix 1: The COVID-19 Stigma Scale for Patients<sup>a</sup>

S.N		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I am very careful who I tell that I had COVID-19					
2	Most people are uncomfortable around someone with COVID-19					
3	I feel I 'm not as good a person as others because I had COVID-19					
4	I have lost friends by telling them I had COVID-19					
5	Telling someone I had COVID-19 is risky					
6	People with COVID-19 are treated like outcasts					
7	People's attitudes about COVID-19 make me feel worse about myself					
8	People I care about stopped calling after learning I had COVID-19					
9	I work hard to keep my COVID-19 a secret					

The COVID-19 stigma scale for patients

10	Most people believe a person who had COVID-19 is dirty					
11	I feel guilty because I had COVID-19					

<sup>a</sup>Based on the Berger-HIV Stigma Scale.<sup>11</sup>