

# Psychological effect on corona pandemic in suspected and positive cases in Bhilwara district in Rajasthan: An observation study

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## Abstract

**Background:** Mental fitness care has been primarily focused on reducing grief and psychotherapy. However, mental health is different from the absence of mental contamination and can have psychological, social and psychological well-being. The aim is to evaluate the Hamilton Depression Rating in Covid-19 patients at Government Medical College, Bhilwara, Rajasthan. **Materials and Methods:** This is an observational study on Covid-19 positive patients admitted to MG Hospital and Medical College Bhilwara. During the Covid-19 outbreak, a total of 120 Covid-19 positive patients entered between 18 March 2020 and 30 May 2020. HDRS was originally developed for hospital patients, thereby emphasizing the physical symptoms of depression. HAM-D is designed to rate the severity of depression in Covid-19 patients. Although it contains 21 areas, calculate the patient score on the first 17 answers. **Results:** Our study showed that total 520 covid-19 suspected and positive patient admitted between 18 March 2020 to 30 May 2020 during the outbreak of covid-19. Out of 520, 120 covid-19 positive patients and 400 covid-19 suspected patients. Anxiety present in 95.83%, change in mood 55% and fear of death 23.33% in positive patients and anxiety present in 57%, change in mood 19% and fear of death 13.5% in suspected covid-19 patients. **Conclusions:** Severe COVID-19 may cause delirium in the acute stage of illness, followed by the possibility of depression, anxiety, fatigue, insomnia, and posttraumatic stress disorder (PTSD) over the longer term, new research suggests.

**Key words:** Covid-19, Anxiety, Psychological, Depression.

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## INTRODUCTION

Coronavirus Disorder (COVID-19) is an infectious disorder that results from a newly determined coronavirus. Coronavirus Disorder 2019 (COVID-19) is an infectious disease caused by acute respiratory syndrome coronavirus 2 (SARS-CoV-2).<sup>1</sup> The disorder was first reported in December 2019 in Wuhan, the capital of Hubei Province, China. The ongoing 2019-20 coronavirus epidemic is reported to be continuing

worldwide.<sup>2,3</sup> Common symptoms include fever, cough, and shortness of breath.<sup>4</sup> By 6 April 2020, more than 1,270,000<sup>5</sup> incidents were reported in more than 200 international locations and regions, with an additional<sup>6</sup> out of 69,500 deaths and more than 264,000 were recovered. The novel coronaviruses COVID-19 are spreading across the globe because December 2019 has infected hundreds of thousands of human beings, shut down major cities, triggered unprecedented global travel restrictions, and affected global information and terrorism. The total population of Rajasthan is about 6.89 crore, of which 25 lakhs live in Bhilwara districts. So far, of the 120 influencers for coronavirus in the district, fifty-six have been recovered and 3 have died. In the long term, the analysis indicates that SARS and MERS survivors are at increased risk for mental illnesses such as depression, anxiety, fatigue, and post-disturbing stress disorder (PTSD), which can last months and years after being discharged from the hospital. Come on later. Although no information about these diagnoses is

available in COVID-19 sufferers, the authors state that the medical community should be aware of the high rates of those common psychological problems following the current epidemic.<sup>7</sup> There are a number of objectives that severe coronavirus infection can have psychological consequences, including the direct effects of viral infection (on the central angiolytic system), physical compromise (e.g., low blood oxygen, immune response), and medical intervention. Other factors are associated with wider social impacts, social loneliness, the psychological effects of a single profound and life-threatening disease, and concern and stigma for others. Although the COVID-19 epidemic affects a large part of the world's population, little is known about its potential impact on mental health.<sup>7</sup> Traditionally, mental fitness care has been primarily focused on reducing grief and psychotherapy. However, mental health is different from the absence of mental contamination and can have psychological, social and psychological well-being. The aim is to evaluate the Hamilton Depression Rating in Covid-19 patients at Government Medical College, Bhilwara, Rajasthan.

### MATERIALS AND METHODS

This is an observational study on Covid-19 positive patients admitted to MG Hospital and Medical College Bhilwara. During the Covid-19 outbreak, a total of 120 Covid-19 positive patients entered between 18 March 2020 and 30 May by 2020. The study was planned after approval by the ethics committee. MG Hospital and Medical College has been designated for the separation and management of suspected and confirmed cases of COVID-19 in the Tertiary Care Center of Bhilwara, Rajasthan. The Isolation facility at our hospital is assessed for readiness according to a standardized checklist by the Ministry of Health and Family Welfare of India (MoHFW).<sup>8</sup> All health care personnel who take care of infected patients have received extensive training and demonstrated the ability to implement infection control practices. Nasopharyngeal and oropharyngeal swabs were tested at the Jaipur Medical and RVRS Medical College, Bhilwara for detection of COVID-19

using quantitative polymerase chain reaction RTPCR for validation. The medical records of the patients were analyzed by the MG Hospital Bhilwara research team. All data were reviewed by the research team. The recorded data includes demographic data, medical history, risk history, underlying comorbidity, symptoms, signs, and laboratory results; Chest computed tomographic (CT) scan, 2D echo and treatment measures (antiviral therapy, anti-retroviral therapy, anti-malarial therapy, antibiotics and respiratory support). HDRS (also known as Ham-D) is a physician-administered Depression Assessment Scale. HDRS was originally developed for hospital patients, thereby emphasizing the physical symptoms of depression and depression. The scoring method varies according to the version. For HDRS17, a score of 0–7 is generally accepted to be within the normal range (or clinical remover), but 20 or more is generally accepted for admission to a clinical trial (at least moderate severity). Reference) score required. HAM-D is designed to rate the severity of depression in Covid-19 patients. Although it contains 21 areas, calculate the patient score on the first 17 answers.<sup>9</sup>

### RESULTS

Our study showed that total 520 covid-19 suspected and positive patient admitted between 18 march 2020 to 30 may 2020 during the outbreak of covid-19. Out of 120 covid-19 positive patients and 400 covid-19 suspected patients. Out of 120 positive patients 56 patients were normal and 64 patients were moderate severity Hamilton depression rating scale and 280 patients were normal and 120 patients were moderate severity HDRS in suspected cases (Table 1). In table 2, out of 120 positive patients, 40 patients were symptomatic patients. Of 14 (35%) patients were severe HDRS and 80 patients were asymptomatic patients. Of 50 (62.5%) patients were severe HDRS in our study. Anxiety present in 95.83%, change in mood 55% and fear of death 23.33% in positive patients and anxiety present in 57%, change in mood 19% and fear of death 13.5% in suspected covid-19 patients.

**Table 1:** Hamilton depression rating scale in Positive and suspected Covid-19 patients

HDRS	Positive patients (N=120)	Suspected patients (N=400)
<b>0-7 (Normal)</b>	56	280
<b>More than 20 (Moderate severity)</b>	64	120
<b>Total</b>	120	400

**Table 2:** Hamilton depression rating scale in Positive Covid-19 patients

HDRS	Symptomatic without comorbidity	Symptomatic with comorbidity	Asymptomatic without comorbidity	Asymptomatic with comorbidity
<b>0-7 (Normal)</b>	20	6	22	8
<b>More than 20 (Moderate severity)</b>	10	4	48	2
<b>Total</b>	<b>30</b>	<b>10</b>	<b>70</b>	<b>10</b>

## DISCUSSION

In our study a total of 520 Covid-19 suspected and positive patients were admitted at the time of admission between 18 March 2020 to 30 May 2020 during the outbreak." Although there is little evidence to suggest that common mental illnesses beyond short-term amnesia are a symptom of COVID-19 infection, clinicians should monitor for the occurrence of common mental illnesses such as depression, anxiety, fatigue and PTSD disorders." Weeks and months of recovering from a serious infection, as seen with SARS and MERS."<sup>7</sup> Acute coronavirus infections have many psychological consequences, including the direct effects of viral infections (including the central nervous system), the level of physical compromise (eg, low blood oxygen), immune responses, and medical interventions. Other factors are related to wider social impact, including social isolation, the psychological impact of a novel serious and life-threatening disease, anxiety and the stigma of infection to others. Anxiety present in 95.83%, change in mood 55% and fear of death 23.33% in positive patients and anxiety present in 57%, change in mood 19% and fear of death 13.5% in suspected covid-19 patients in our study. Dr. Kamal Kant Kohli in Lancet, referred to a study that analyzed data from two studies systematically assessing the general characteristics of hospitalized patients with SARS and MERS, finding that 28% (36/129) of patients had confusion, suggesting forgetfulness was common during acute illness. There were frequent reports of low mood (42/129; 33%), anxiety (46/129; 36%), impaired memory (44/129; 34%), and insomnia (34/208; 12%) during the acute stage. Twelve studies found amnesia on COVID-19 (26/40 confusion in intensive care unit patients, 65%), 40/58 anxiety in ICU patients, 69%; And a similar picture appeared with evidence of the consciousness that had changed in 17/82. Patients who subsequently died, 21%) were critically ill. Six studies looking at patients with SARS and MERS after recovering from an initial infection had low mood (35/332 patients, 11%), insomnia (34/208, 12%), anxiety (21/171, 12%), and irritability. (28/218, 13%), memory loss (44/233, 19%), fatigue (61/316, 19%) and painful memories (55/181, 30%) over a follow-up period ranging from 6 weeks to 39 months. The researchers estimate that the prevalence of PTSD among SARS and MERS survivors

was 33% at an average of 34 months after the acute stage of illness (121/402 cases in four studies), whilst rates of depression and anxiety disorders was around 15% at an average of 23 months (77/517 cases from five studies) and one year (42/284 cases from three studies) after the acute stage respectively.

## CONCLUSIONS

Severe COVID-19 may cause delirium in the acute stage of illness, followed by the possibility of depression, anxiety, fatigue, insomnia, and posttraumatic stress disorder (PTSD) over the longer term, new research suggests.

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