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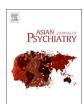
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Why all COVID-19 hospitals should have mental health professionals: The importance of mental health in a worldwide crisis!



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ABSTRACT

COVID-19 pandemic has led to a worldwide crisis. At present, everyone is focusing on the prevention of COVID-19 infection, preparing and discussing issues related to physical health consequences. However, it is important to understand that the life-threatening negative physical health consequences are going to be faced by a few, but everyone is going to face the negative mental health consequences of the pandemic. At various places COVID-19 hospitals are being established, to address the physical health consequences of the pandemic. However, mental health professionals have not been very actively involved in the management of people going through this pandemic. This viewpoint discusses the mental health consequences of the pandemic for the health care workers, people who are undergoing quarantine, people who are admitted to the COVID-19 hospitals, and those who have recovered from the infection. The article also highlights the mental health needs of people at different levels and the kind of interventions, which may be carried out.

1. Introduction

To say the least, the Coronavirus disease (COVID-19) has taken the world by storm. Within a short span of about 3 months, more than onethird of the world population is under lockdown and the infection has been declared a pandemic. Every day, the number of cases and the number of deaths related to COVID-19 are increasing. The COVID-19 infection has been mainly reported to be associated with respiratory symptoms, with the deaths being attributed to acute respiratory distress syndrome (Huang et al., 2020). From this point of view, COVID-19 appears to be a pure medical emergency. Keeping this in mind, across the globe, including India, many hospitals have been converted into COVID-19 hospitals or have opened COVID-19 wards. In most of the wards and the hospitals, the people involved are from Internal Medicine, Pulmonary Medicine, Intensive Care Specialists, experts from community medicine, etc. Mental Health Professionals (MHPs) are either not involved or are given roles in taking care of some of the administrative duties, with possibly little role in the clinical management of people with COVID-19 infection. MHPs have also possibly accepted this marginalized role in the management of this global crisis, considering we are dealing with a medical emergency.

It is important to understand that the impact of COVID-19 pandemic extends beyond that of physical illness, and in fact, we would say that, it has mental health impact on more number of people than those experiencing the physical health impact. The numbers of people affected by the fear of COVID easily surpass those infected with it. We all will agree that the pandemic is going to affect everyone, sooner or later. Further, we all have to follow the lockdown, preventive measures of social distancing; face the fear of possibly getting infected, of infecting others, possible hospitalization, the uncertainty of getting a bed in the hospital at the time of the need, getting a ventilator at the time of the need, possible death, and if dead, a respectful cremation or burial as per our religious affiliations. Thus, compared to the physical health impact, which is likely to be characterized by flu-like symptoms for most, and a small but significant proportion developing severe symptoms and needing intensive care, the general population at large is braving the psycho-social impact of the illness (Asmundson and Taylor, 2020). Further, given the lockdown, significant socio-economic repercussions can be anticipated, which is again going to lead to a lot of psychological issues (United Nations, Social Impact of COVID-19, 2020). Similar situations have not been dealt with at this scale in the recent past. The novelty of the situation is perplexing for the lay public and health care

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^{2.} Is this approach correct- are there mental health issues?

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workers (HCWs) alike.

2.1. Impact of Service reorganization and establishment of COVID-19 wards on HCWs

In terms of the hospital setting, till now, possibly, all the specialists were working independently in their departments, following hierarchy. Suddenly, the pandemic has called for the pooling of manpower from different departments to work together. This in itself is leading to a crisis. The majority of the people involved in the establishment and management of COVID-19 wards and hospitals are those, who are at the senior levels. These senior officials are typically used to giving orders. rather than taking orders. Further, for the first line HCWs, starting from doctors, nurses, laboratory staff, hospital attendants, people involved in security, etc, it is a different kind of crisis. They are worried about their safety and the personal protective equipment (PPEs), duties in the COVID-19 wards, need to be quarantined after the duty, worried about themselves getting infected and spreading the infection to their family members, etc. Further, they are haunted by some of the ethical dilemmas they are going to face, such as, what to do- if they have symptoms (to report or not to report- if they report, they would be considered as someone, who is trying to avoid the duty; on the other hand, if they don't, then what if they end up spreading the infection to others), what are they going to do when they have to prioritize death saving devices, such as ventilators, if the number of patients exceeds the resources (Kang et al., 2020; Rajkumar, 2020). Further, the treatment protocols are changing daily and many a time, there is no clear consensus on which medications or strategy to follow. The protocols for managing the COVID-19 positive cases are modified as per the settings and availability of medications/technologies/machinery. The guidelines made in one country do not suit the others and therefore, till now no universal management guidelines have been developed (WHO, 2020, CDC, 2020, MOHFW, 2020). This creates further doubts about the decision-making process of HCWs. Another important issue is whether or not to resuscitate with differing protocols across countries and settings. Therefore, many a time, the HCWs may face the dilemma of doing the best for the patients or risking a significant increase in exposure to aerosols. The HCWs may end up visualizing death helplessly, in contrast to their usual practice of making their best efforts (Edelson et al., 2020). Moreover, the COVID-19 wards have patients of all age groups ranging from new-born babies to elderly patients with multiple co-morbidities. All these issues create 'panic' and a 'worrisome' picture in the minds of the front line HCWs and it further adds to their anxiety.

2.2. Use of PPEs

In terms of PPEs, the whole process of donning and doffing the PPEs, have converted the HCWs to look different to their patients, who also have to learn to control their instincts and at the same time care for others. The HCWs are expected to be fully trained and prepared to use PPEs for a long duration. Moreover, the training needs are to be modified as per the educational status of the HCWs (for example training of PPE for doctors and nurses may not apply to other class of HCWs; the details need to be told in a more simplified manner as per the needs and exposure to patients with COVID-19).

Further, this is compounded by the fact that we have to economize the use of PPEs, so that no retakes are allowed, once they are in PPEs. Further, the HCWs are facing other issues like, going in close contact with the patient to collect the throat swab and carryout certain aerosolgenerating procedures, all of which can lead to significant anxiety.

2.3. Managing quarantine centres

Personnel who are maintaining the quarantine centres/facilities are facing challenges of keeping the situation under control, so as not to spread the infection.

2.4. Emergent mental health issues in HCWs

All these situations are bringing up a lot of mental health issues, like anxiety, fear, depression, insomnia, low self-esteem, excessive use of substances, etc, to say the least. Further, these problems are leading to frequent interpersonal issues among the HCWs, between the first-line workers and the administrators; HCWs, and human resource administrators. Literature suggests that "Every clinician, is also a patient" (Lai et al., 2020).

2.5. Emergent mental health issues in patients with COVID-19 infection, those in quarantine and their family members

Besides, the HCWs, there are 3 other categories of people, who are facing a mental health crisis, i.e., those who are quarantined, those who have been diagnosed with COVID-19 infection and their family members. Those who are quarantined, especially, at the facilities outside their home are facing an unprecedented situation of social isolation, social disconnectedness, loneliness, anxiety, depression, phobia, fear of getting the infection, etc(Brooks et al., 2020). Further, if they are being tested, they have to face, the uncertainty of the test results. Those who have been diagnosed with COVID-19 infection are getting hospitalized, and rightly so. However, they are facing, similar mental health issues of social isolation, social disconnectedness, loneliness, anxiety, depression, phobia, fear of getting the infection, etc (Brooks et al., 2020). Additionally, they are feeling stigmatized, in the hands of the HCWs, with a reduction in empathy due to the use of PPEs, while being taken care of. Further, they are facing uncertainties towards the late stage of their admission, with respect to test reports being positive or negative. These people are also going through the psychological issues of anger (who infected me), guilt (spreading the infection to their family members and others), self-stigma, and anticipatory stigma (how are people going to react to them, after they get well). It is also often seen that it is not one person, but often the whole family or multiple members of a family are found positive. Due to this, people, while being in the hospital are also worried about the health of their near and dear ones, are seeing their relatives being put to the life support devices, and are facing the death of their near and dear ones. They are also acting as caregivers for their relatives if they are in hospitals. The family members, who, fortunately, have not been infected, are facing a situation, which is beyond, imagination in a country like India, i.e., your relatives are admitted in the hospital, and you are locked down at home, and cannot do anything beyond providing logistics.

2.6. Worsening of pre-existing mental illnesses

The role of stress in precipitation of a new episode and relapse of mental illnesses is well known. Accordingly, at the time of the pandemic, people with pre-existing mental illnesses are more vulnerable to develop symptoms. Further, this is compounded by the fact that due to lockdown many patients are running out of their ongoing medications. Further, these people may be more vulnerable to the COVID-19 infection, because of difficulty in remaining confined to one place or inability to follow the measures required to avoid infection. Accordingly, people with pre-existing mental illnesses should be considered more vulnerable to the infection and their health care need to be addressed adequately.

3. What is the role of MHPs in this crisis?

In light of this unparalleled situation, it is imperative to highlight the work laid out for MHPs. Mental health care often takes a back seat where physical health is at risk, but it is actually the cause of substantial distress and disability when faced with a serious physical illness, which

threatens life. In the current scenario, everyone is going through mental distress, which requires attention. In fact, it is said that the COVID-19 pandemic is actually accompanied by a mental health pandemic, which is going to last beyond the COVID-19 pandemic(Asmundson and Taylor, 2020). In this scenario, the MHPs have to not only address the mental health needs of their patients but need to focus on the general population at large. Community psychiatrists have a big role in addressing the general population at large, by imparting correct knowledge/information, teaching self-care skills, and the required behavioural changes. However, certain vulnerable groups such as HCWs, people in quarantine, patients diagnosed with COVID-19, and caregivers/family members of people in quarantine or those diagnosed with COVID-19. require specific interventions to address their psychological distress and despair. As most of these vulnerable groups, will be part of the hospital taking care of COVID-19 cases or will be in contact with these hospitals, the Consultation-Liaison (CL) Psychiatrists have a big role to play. The CL psychiatrists have to justify their role as medical experts, a good communicator, collaborator, a manager and a supervisor, a leader, a health advocate, a scholar, a researcher, and a true mental health professional(Grover, 2011).

4. Mental health issues of the HCWs and how to address the same

HCWs including doctors, nursing staff, and other professionals have risen to the challenge posed by the pandemic. Data suggests that more than 3000 HCWs were infected with the virus in China ("ICN COVID-2019 Update," 2020), more than 9000 in the USA("CDC report finds 9, 000 health-care workers are infected with coronavirus and 27 have died - The Washington Post," 2020) and they constitute about 10 % of total infected cases in Italy. It is natural for the HCWs to harbor the fear of infection and its consequences. HCWs world-over are struggling with the fear of, and being infected with COVID-19. Another issue, which is of concern, is violence against HCWs who are involved in providing the services at this crucial time. This is making the HCWs very apprehensive and vulnerable to the negative psychological consequences. Despite education modules, protecting oneself from being infected is always a priority and rightly so. It is necessary to address the concerns of the HCWs at various levels. An MHP can help in easing the worries. The availability of an MHP as part of the COVID-19 unit can help in allaying some of the concerns of the HCWs. In addition, continued support for professional help through tele-facilities can aid in addressing the daily struggles, frustrations, and anxiety that are expected to occur. Various issues of HCWs are listed in Table 1.

An MHP can help in identifying vulnerable individuals who are beginning to manifest symptoms or already have pre-existing symptoms in the face of this unusual stress. Of particular importance are HCWs with personality traits, particularly anxious/avoidant and anankastic traits, which can impair their functioning. These individuals can benefit from individual sessions, with a focus on problem-solving through brief psychotherapy sessions. HCWs with obsessive-compulsive symptoms/disorder, whether pre-existing or new-onset can particularly benefit from the presence of an MHP. Mood and substance use disorders may need to be addressed. Nicotine withdrawal in itself can be a significant cause of distress and has to be kept in mind, especially considering the possibility of use with PPEs.

Additionally, the MHPs have an important role in boosting the team morale, motivating the team members to continue on the mission, addressing the interpersonal issues among the HCWs, addressing the issues between HCWs and the administrators, teaching self-care skills, and maintaining positive thinking. The MHPs can be instrumental in improving mental health as well as addressing new and existing issues in the context of this pandemic. Moreover, the basic communication skills required to address patients with COVID-19 infection are found to be lacking among the already stressed and burnout HCWs. In many scenarios, it has been seen that many doctors who are from different specialties' are being posted in the COVID-19 wards, who might be

having minimal patient interaction in the past and, resultantly have poor communication skills to allay the patient's anxiety and stress. MHPs can play an important role in teaching communication skills to deal with already aggrieved patients, in team-building exercises, by identifying compatible people who can work together or forming teams of members who can complement each other rather than disrupt the work.

The decision-making role which is likely to be imposed on some doctors may be unprecedented, leading to significant discomfort. Protocols regarding triage and allocation of resources should be available to ease functioning. Keeping in mind the expected distress and level of functioning required in the COVID-19 wards/hospitals, it may be necessary for the MHPs to screen HCWs prior to their posting, and consider intervening in vulnerable individuals. As the pandemic is going to continue for some time, it is expected to lead to physician burnout. The MHPs have to screen the HCWs for the same and address the emergent issues. As the pandemic has led to reorganization or is going to lead to reorganization of the services and roles of many people, it is also going to lead to heartburn among people with respect to the administrative roles and importance given to them. This is going to lead to new interpersonal issues, which must be anticipated and solutions must be kept in place so that the morale of the team is maintained.

MHPs also have a big role in terms of assuming the leadership role, acting as negotiators, good communicators, and collaborators in instilling the team approach in the whole process. MHPs should also involve themselves in the policy-making, motivating the people to work as a team and acting as a role model for others in the wake of the crisis.

MHPs can also act as advocates, for certain HCWs, such as those aged > 60 years and/or physical comorbidities, with respect to their posting in the high-risk areas. Further, MHPs should also play a role in advocating stipulated working hours, which can be less stressful for the HCWs and recommend rotation of HCWs between the low risk and high-risk area.

MHPs can provide general aid by formulating schedules, sleep hygiene, screen media use, and relaxation exercise which can be circulated in audio and video format for easy use.

While prescribing medications for HCWs, the psychiatrist must consider the severity of the symptoms. Drug interactions and comorbidities must not be ignored to ensure minimal adverse reactions with maximal effectiveness. Various measures which can be formulated and carried out for HCWs are listed in Table 1.

5. Mental health issues of people in quarantine

Quarantine in the context of the COVID-19 pandemic is understood as "strict isolation imposed on a person to prevent the spread of the disease". However, here there is a need to also clarify the term social distancing, which has become a buzz word in the wake of the COVID-19 pandemic. The term "social distancing', is actually a misnomer, and should be understood as physical distancing, without any "emotional distancing". The word quarantine and social distancing are being considered as some kind of torture, rather than preventive measures. Governments of all the countries are taking measures to provide all kinds of facilities to people in quarantine so that they can be in comfort. Despite all this, people are feeling unsafe about going to quarantine. Resultantly, they are hiding their travel history and symptoms. Resultantly, for some, the quarantine is a forced activity and some of the people are taking it by choice, as their duty to prevent the transmission of the disease.

However, both groups are vulnerable to adverse mental health outcomes. The various issues can range from mild anxiety to various other psychological reactions, development of new psychiatric syndrome, or worsening of pre-existing psychiatric disorder(Das, 2020) (Table 2). Beyond these, there may be interpersonal issues, with the HCWs. The different measures which can be taken are listed in table-2.

 Making appropriate recommendations about posting to various areas of work

Table 1 Mental Health Issuesamong the Health Care workers working in a COVID-19 Hospital/Ward and the required interventions.

Issues	General Intervention	Mental Health Interventions
Protecting Self from Infection Risk of exposure while on duty (in other wards, OPD, Emergency) Risk while posted in COVID ward Risk while posted in COVID ICU Exposure while performing procedures Fear of contracting the infection	Educating about precautions to be taken Providing adequate PPEs Proper use of PPEs Be sensitive to the needs of HCWs Training for Donning-doffing Teaching communication skills Keeping the team morale high Freedom of expression Addressing the genuine issues Avoid overworking people Respect disclosure Motivating the workforce Cohesive approach	 Assess the specific concerns of HCWs Screen for mental disorders, pathological anxiety versus genuine concern Availability to talk before being posted in a COVID unit (in person) Training for the new role Teaching Self-care skills to maintain proper mental balance Availability in person or through tele-facilities for HCWs posted in COVID units
Ethics versus Duty Guilt of improper/partial examination of patients Guilt of lack of proper contact with patients Reporting their own symptoms Fear of spreading infection	 Educating the HCWs about risk assessment versus providing medical care Avoid heroics at the cost of infecting self and others Follow the Standard Operating Procedures Respect self-disclosure and take appropriate measures Take precautions to best of your abilities 	 Provide psychological support Address anxiety
 To other patients Colleagues Taking the infection home to the family 	Follow the advice for donning and doffing Follow the advice given for the quarantine	
Use of Personal Protective Equipment It can lead to significant anxiety, especially in the initial stages due to unfamiliarity of use Suffocation Whether using it properly or not Agoraphobia	 Education regarding the proper use and discarding Training for donning and doffing Screening people for anxiety disorders Disclosing agoraphobic symptoms, upfront 	 Instructions about breathing and relaxation Prepare for the required behavioural change
Agoraphobia Dealing with death Death of patients Death of colleagues Family members Ethical Dilemmas Triage Lack of resources Allocation of ventilators Stigma Self-stigma: why am I in this profession Anticipated Stigma: May will adversely react if they know that I am an HCW Public stigma: Others may fear that the HCW will spread infection, Being ostracized by neighbors, Eviction notices from	 Preparing people, as if we are in a war situation, the aim is to win the war, we will lose some of our warriors Hospital/Unit protocols Availability of senior officials to guide the decision-making process Education of the public Anti-stigma campaigns Rewarding the HCWs Glorifying their contribution Raise voice against stigma Legal provisions to protect HCWs against stigma 	 Crisis intervention Use of adaptive coping Ventilation (address guilt if any) Reassurance regarding decisions made Managing anxiety, guilt, and other psychiatric morbidities
landlords/ housing societies Quarantine Social isolation, Loneliness, disconnectedness, depression, anxiety, panic, insomnia, substance use Being away from family and worrying about them Access to the outside world (by means of the internet) Guilt about not performing the duties	 Involvement in various activities while maintain quarantine Avoiding screen use for long hours Restricting the time spent reading/watching news 	Through tele-facilities Self-care skills Screen for mental health morbidity, including the risk of suicide Maintaining activity schedules Relaxation training Ventilatory sessions Problem-solving Use of adaptive coping Avoid the use of substances Keep away from Infodemics Detoxification from social-media Adequate sleep
 Interpersonal Problems Work allocation: "not my job" Who will get exposed: Senior vs Junior 	 Pre-defined work roles of different personnel At whatever position, you were prior to the pandemic, now should be prepared to follow the advice and suggestions Amicable resolution of conflicts by the appropriate intervention of seniors 	Mental health professionals can assume the leadership role Allow everyone to speak out Encourage leadership to interact with front-line workers and consider suggestions Group sessions with various teams to improve communication Address physician burnout
Health care workers with known psychiatric morbidity or new-onset psychiatric morbidity Likelihood of exacerbation/decompensation in a high-risk unit (especially if relating to washing/cleaning) Current level of functioning	 Accept self-disclosure Provision for mental health assessment and management Provision for providing medications and leaves as per requirement 	 Appropriate assessment/screening prior to posting in high-risk area to ensure smooth functioning Ensure compliance Supportive psychotherapy Making appropriate recommendations about

Table 2
Mental Health Issues among those in Quarantine and the role of the MHP

Mental Health Issues among those in Quarantine and the role of the MHP.		
Mental Health issues	General Measures	Mental Health Interventions
 Fear, anger, panic, anxiety, depression, frustration, Insomnia Isolation, disconnectedness, loneliness Uncertainty about the outcome Fear of unknown Fear of death Dealing with not being tested, but have to remain confined New-onset psychiatric morbidity Apprehension about developing the infection Pathological anxiety in response to normal physical changes Hypochondriasis-linking any small thing to developing of infection Withdrawal from substances Accepting food, which may not be of their own choice Not accepting the social confinement 	 Preferably advise for home quarantine, if this is feasible and is acceptable as per the requirements to prevent the spread of the infection Quarantine in a comfortable place Provide the basic amenities Wifi/internet connectivity Entertainment facilities- television, provision for listening to music Availability of books 	 Screen and surveillance for any psychiatric morbidity including substance use and suicidality, and appropriate management Preparing the person for quarantine- clarifying the myths, listening to the concerns and addressing the same Encouraging abstinence Encouraging emotional connectedness with people by using phone/video calling Breaking the bad news Mediating and addressing the interpersonal issues with the administrators/ managing the quarantine facilities Encourage them to honestly disclose worsening of physical health condition or emergence of new physical symptoms Encourage them to cooperate with the health surveillance activities Encourage diary writing/writing emails/blogs, etc

6. Mental health issues of people infected with COVID-19 infection

· Need to use the substances

People diagnosed with COVID-19, naturally are expected to be anxious and concerned. With the circulating media reports and a reported death rate of almost 15 % in some countries(Baud et al., 2020), the general public is obviously afraid of contracting the virus. This fear can substantially rise once diagnosed, as the focus then shifts to "life or death". Many people may not have faced as grave a situation in the past and may find it difficult to understand what is going on around them. Many people who are admitted may be asymptomatic or have minimal symptoms, and are only admitted for testing positive. There may be ambivalence regarding admission in such patients. People may be distressed by the presence of disabling symptoms, such as fever, cough, and respiratory distress. Additionally, they, have to face the possible changed attitude of the clinicians and other HCWs, with respect to the way they are examined and tested. For patients who are looking for support, there may be a perception of rejection even from HCWs as they try to protect themselves from exposure by limiting contact and examination.

6.1. How to address the mental health issues of people diagnosed with COVID-19 infections

All the COVID-19 hospitals/units should have Wi-Fi facilities so that these patients can be attended by using different Telemedicine modes and their psychological issues can be evaluated at the baseline, monitored continuously and psychological interventions can be carried out, even by staying physically away from the patients. The MHPs can be of aid in explaining the nature of the illness and the need for admission and isolation to address the discomfort of patients. May be initial screening may be done by the psychiatrist, who on the basis of severity of the psychological issues and kind of psychological help required, can determine the person who will provide psychological help to people with COVID-19 infection. A stepped care approach, in which those who require only simple interventions like activity scheduling may be attended to by less trained people, and those patients who have higher psychological needs may be attended by those with a higher level of training and expertise.

6.2. Addressing pre-existing mental health illnesses among those with COVID-19 Infection

Pre-existing psychiatric disorders need to be addressed with a special focus. With the onset of the viral illness, mental health issues are often forgotten until they become unmanageable and impede treatment. Medications may be forgotten, or intentionally stopped, leading to exacerbation of symptoms. It can be particularly problematic in patients with depression and anxiety disorders, especially those with obsessive compulsive disorder, which may colour the perception of the illness. In addition, there can be a significant behavioral disturbance and poor cooperation for treatment which can also generate ill-will in the treating team. An MHP attached to the COVID unit, may even observe the situation in the wards and ICUs, even if it is by tele-facilities, and identify patients who require targeted intervention. Similarly, people with mental illness, who become violent during their ward stay or while staying in the quarantine facility, may require the use of injectables. In such a scenario, the MHPs must take into consideration all the ongoing medications and their side effects, before choosing a psychotropic medication.

People with pre-existing mental illnesses can benefit from the support and reassurance of a trained MHP. Another concern likely to emerge is that of withdrawal symptoms in patients with substance dependence. With the high rate of nicotine/tobacco dependence and opioid dependence in certain areas, it is likely that a significant proportion of patients will develop withdrawal symptoms. Effective management of the same can lead to improved communication, treatment adherence, and experience of the patients. It will also help in avoiding miscommunication and friction between the treating team and patients.

6.3. Addressing issues of families admitted with COVID-19 Infection

Some of the individuals may be admitted with their family members because of them testing positive together. In this scenario, some may take the blame upon themselves and hold themselves accountable for spreading the virus to their near and dear ones. It may lead to significant psychological distress and even amount to depressive and psychotic reactions. The same needs to be adequately addressed in a timely fashion. This may progress further if family members are sicker than self, or one wants to give up treatment to ensure that their loved ones get the necessary resources to survive. The patient may desire to

stop treatment prematurely or give up hope when there is a likelihood of improvement. Such decisions may be undertaken when patients lack mental capacity and have irreversible consequences. Thus, the HCWs must be attentive and involve an MHP with the slightest doubt. Patients should also be regularly be monitored for suicidality. In addition, with increasing severity and need for intensive care, patients are likely to develop delirium.

Close to recovery, patients may face the stigma associated with COVID-19 infection, unlike any other illness in recent times. It can even be compared to the plague and is substantially more than that associated with the AIDS epidemic(Logie and Turan, 2020). One may fear the reactions of loved ones and society at large. A significant fear is of persecution; being penalized for hiding an illness to the tune of breaching national security. These issues are difficult to deal with on their own, but when isolated in a hospital ward, with minimal contact with the outside world and loved ones, it can have a catastrophic im-

As it is mandatory, prior to discharge, the patient must test negative for the virus on 2 occasions before they are discharged. While going through the same, patients are always faced with the apprehension of test coming positive again, this can generate a lot of anxiety because it can lead to a continuation of hospitalization. MHPs should prepare the patients for all possible outcomes. Throughout the hospital stay and

after that too (Table 3), an important role of MHPs for patients admitted with COVID-19 infection is to instill hope, teach self-care skills, ensure a good sleep, help the patients follow an activity schedule, evaluate and address the spiritual distress.

7. Issues among the family members of people quarantined or diagnosed with COVID-19 infection

Family members of patients diagnosed with COVID can be expected to be worried and concerned. In a typically Indian setting, when someone is admitted to the hospital, particularly in the government set up, the family members are expected to take over at least some of the caregiving roles. They are expected to stay with the patient in the wards, and run around, such as bringing medications, bathing/ sponging, and feeding the patient. Even in the ICUs, family members are expected to be available at all times, for various reasons. The COVID-19 infection is novel, also because to ensure safety, family members are expected to stay away, from the patients, wards, and even the hospitals. This can lead to a lot of uncertainty and distress among caregivers. Some of them have to undergo self-quarantine, anticipatory grief, and other negative psychological consequences (Table 4). This group of people can have the need of getting updates about their relatives in the hospital. The MHPs can also connect with them by using

Mental Health Issues among people who are diagnosed with COVID-19 infection and the required interventions.

Pre-existing mental and physical health issues	

- Patients with known psychiatric disorders
- · Patients with substance dependence
- People with predominant Personality traits/disorder- Anxious, Anankastic, Cluster B
- New-onset mental morbidity

Issues

New Issues close to diagnosis

- Who infected me? Anger
- Did I infect others? Guilt
- Who all have got infected with me? what is happening to my parents, children, spouse, colleagues, etc
- Will I survive? Fear
- · Will I get the ventilator- Anticipatory Anxiety
- Acute Stress Reaction
- Anxiety, Depression, Insomnia

Issues during the stay in the COVID-19 ward/Hospital

- Loneliness, social disconnect, social isolation
- · Depression, Anxiety, Disturbed sleep, Agoraphobia
- · Hypochondriasis, Somatosensory Amplification
- Uncertainty about future
- Discrimination by the health care workers
- The feeling of not being cared for

Issues close to recovery

- Feeling of relief
- Apprehension about repeated test results- what if it is not negative
- How are people going to react to me- Stigma
- My family members (are they going to blame me)
- My neighbors (are they going to discriminate me)
- My employer (will my job continue)
- My clients (will people come to my shop)

• Encountering bad news- losing a family member/colleague/friend Beyond recovery from COVID-19 infection

- · Psychiatric morbidity- depression, anxiety, substance use, Grief, PTSD
- Guilt about themselves being responsible for their death
- · Guilt about damage to society per se
- · Issues of financial instability, loss of job, stigma

Addressing issues in patients in ICUs

Delirium

- Screen all patients for mental morbidity
- Carry out a baseline assessment of the mental status
- Prepare the patient for the period of confinement and what they are going to face
- Prepare the HCWs dealing with such patients to fulfill the expectations of the patients, with respect to their physical health care needs
- Mediate between patients and the HCWs to minimize the psychological distress
- Use appropriate psychotropics

Mental Health Interventions

- Consider medications and relevant interactions with prophylaxis/treatment such as Hydroxychloroquine
- · Appropriate assessment/screening -Evaluate the psychological issues as a result of being diagnosed with the infection
- · Screening for mental health problems should be an ongoing process
- · Regularly assess for suicidality
- How is the person taking the diagnosis, confinement in the COVID-19 ward
- · Evaluate their concerns and expectations
- Provide psychological support, crisis intervention
- Self-care skills- activity scheduling, sleep hygiene, diary writing, listening to music, talking to near and dear ones
- · Address the interpersonal issues between patients and the HCWs
- · Provide spiritual and religious support
- Mindfulness training
- Preparing for death
- Address spiritual distress
- Instill hope
- · Listen to the patient's fears, hopes, pain, dreams
- · Attentiveness to all dimensions of the patient and patient's family: body, mind, and spirit
- Be honest and compassionate
- · Providing psychological support, supportive psychotherapy
- Breaking the bad news
- Supportive psychotherapy
- · Treat psychiatric morbidity appropriately
- Reorientation cues
- Multimodal intervention
- · Use of psychotropics- consider drug interactions, avoid psychotropics if the patient has hypoactive delirium

Table 4Issues for the Caregivers/Family members of people with COVID-19 infection or those in quarantine.

Caregivers/Family/Contacts	Mental Health Interventions
Uncertainty about the outcome	Screening for mental morbidity
Self-quarantine	 Provide Psychological support
Anticipatory grief	 Update them about the progres
Anxiety	 Preparing for any eventuality
• Depression	 Breaking the bad news
● Stigma	 Mindfulness training
• Isolation	 Relaxation therapy
• Not able to attend the funeral or carryout the rites as per the religious norms	 Spiritual care

the technology of teleconferencing and address their issues such as preparing them for all kind of eventualities, breaking the bad news if any unfortunate outcome occurs for the patient (Table 4)

8. Pandemic as an opportunity for research

As the COVID-19 is unfolding, more and more mental health issues are emerging. Hence, this should be viewed as an opportunity to innovate and carry out research on various aspects of symptomatology and interventions. The researchers should focus all the groups, i.e., the general public, people with COVID-19 infection, those in quarantine, family members of patients, and those undergoing quarantine and HCWs. The pandemic also provides an opportunity to look at the health care systems and how these can be improved.

9. Conclusion

It is not the time for the MHPs to sit back and look at the COVID-19 pandemic as a medical emergency, in which MHPs have no role to play. In fact, if any specialty is going to have a much bigger role during the pandemic and beyond the pandemic is psychiatry. MHPs should look at the pandemic as an opportunity to emphasize the fact that physical and mental health go hand in hand. The MHPs should also carry out research to evaluate the newer methods of communication with the patients and their effectiveness. Further, the research should also focus on the impact of the pandemic on the HCWs, patients with diagnosed psychiatric illnesses including substance dependence, ethical aspects related to death and dying, decision making in medicine, etc.

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Declaration of Competing Interest

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References

Asmundson, G.J.G., Taylor, S., 2020. Coronaphobia: Fear and the 2019-nCoV outbreak. J. Anxiety Disord. 70, 102196. https://doi.org/10.1016/j.janxdis.2020.102196.

- Baud, D., Qi, X., Nielsen-Saines, K., Musso, D., Pomar, L., Favre, G., 2020. Real estimates of mortality following COVID-19 infection. Lancet Infect. Dis. https://doi.org/10. 1016/S1473-3099(20)30195-X. 0.
- Brooks, S.K., Webster, R.K., Smith, L.E., Woodland, L., Wessely, S., Greenberg, N., Rubin, G.J., 2020. The psychological impact of quarantine and how to reduce it rapid review of the evidence. Lancet 395, 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8.
- CDC report finds 9,000 health-care workers are infected with coronavirus and 27 have died The Washington Post [WWW Document], n.d. URL https://www.washingtonpost.com/health/2020/04/14/coronavirus-healthcareworkers-infections/ (accessed 4.21.20).
- CDC: Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19 Google Search [WWW Document], n.d. URL https://www.google.com/search?client = firefox-b-d&q = CDC%3A + Interim + Clinical + Guidance + for + Management + of + Patients + with + Confirmed + Coronavirus + Disease + %28COVID-19 (accessed 4.21.20).
- Das, N., 2020. Psychiatrist in post-COVID-19 era Are we prepared? Asian J. Psychiatr. 51, 102082. https://doi.org/10.1016/j.ajp.2020.102082.
- Edelson, D.P., Sasson, C., Chan, P.S., Atkins, D.L., Aziz, K., Becker, L.B., Berg, R.A., Bradley, S.M., Brooks, S.C., Cheng, A., Escobedo, M., Flores, G.E., Girotra, S., Hsu, A., Kamath-Rayne, B.D., Lee, H.C., Lehotzky, R.E., Mancini, M.E., Merchant, R.M., Nadkarni, V.M., Panchal, A.R., Peberdy, M.A.R., Raymond, T.T., Walsh, B., Wang, D.S., Zelop, C.M., Topjian, A., 2020. Interim guidance for basic and advanced life support in adults, children, and neonates with suspected or confirmed COVID-19: from the emergency cardiovascular care committee and get with the guidelines*-Resuscitation adult and pediatric task forces of the american heart association in collaboration with the american academy of pediatrics, american association for respiratory care, american college of emergency physicians, the society of critical care anesthesiologists, and american society of anesthesiologists: supporting organizations: american association of critical care nurses and national EMS physicians. Circulation. https://doi.org/10.1161/CIRCULATIONAHA.120.047463.
- Grover, S., 2011. State of consultation-liaison psychiatry in India: current status and vision for future. Indian J. Psychiatr. 53, 202. https://doi.org/10.4103/0019-5545. 86805
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M., Xiao, Y., Gao, H., Guo, L., Xie, J., Wang, G., Jiang, R., Gao, Z., Jin, Q., Wang, J., Cao, B., 2020. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet 395, 497–506. https://doi.org/10.1016/S0140-6736(20)30183-5.
- ICN COVID-2019 Update: Data on infected healthcare workers and access to protective equipment vital in prevention of the virus [WWW Document], n.d. ICN - Int. Counc. Nurses. URL https://www.icn.ch/news/icn-covid-2019-update-data-infected-healthcare-workers-and-access-protective-equipment-vital (accessed 4.18.20).
- Kang, L., Li, Y., Hu, S., Chen, M., Yang, C., Yang, B.X., Wang, Y., Hu, J., Lai, J., Ma, X., Chen, J., Guan, L., Wang, G., Ma, H., Liu, Z., 2020. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. Lancet Psychiatr. 7, e14. https://doi.org/10.1016/S2215-0366(20)30047-X.
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., Hu, S., 2020. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. JAMA Netw. Open 3https://doi.org/10.1001/jamanetworkopen.2020.3976. e203976–e203976.
- Logie, C.H., Turan, J.M., 2020. How do we balance tensions between COVID-19 public health responses and stigma mitigation? Learning from HIV research. AIDS Behav. https://doi.org/10.1007/s10461-020-02856-8.
- Rajkumar, R.P., 2020. COVID-19 and mental health: a review of the existing literature. Asian J. Psychiatr. 52, 102066. https://doi.org/10.1016/j.ajp.2020.102066.