



From a public mental health perspective, is it critical to identify and address the mental health impact of COVID-19 on the population at large.

go by, the physical and mental health, and social and economic impacts of the disease, will be inordinately borne by poor South Africans - more than 50% of South Africans live below the poverty line. **Studies** show that 30 months after the SARS outbreak in 2003 (the first massive infectious disease outbreak of the 21st century), a third of survivors met criteria for any psychiatric disorder, a quarter met criteria for PTSD, and approximately 16% had depressive disorders.

This points to the importance of detecting and treating psychiatric illness in people with COVID-19 and their contacts.

Currently, billions of people spanning more than 100 countries worldwide are either in full or partial lockdown, which has been termed the 'world's greatest psychological experiment'. While this may inadvertently be a mammoth experiment, the consequent physical and social distancing appears to be effective in breaking the chain of transmission by reducing the number of people infected by each confirmed case.

That said, the pandemic and the lockdown, independently and in combination, have unintended consequences of severing and inhibiting family and social norms, values, and rituals that will arguably exert a severe toll on the mental health of the world's population, not only in the immediate and short-term but for many years to come. Social isolation and stress linked to the COVID-19 crisis may not only increase the risk of new episodes of mental illness but also the risk of recurrence in persons with pre-existing mental illness.

**Economic Distress**

The economic repercussions of COVID-19 in South Africa will be dire, even with government-led

packages of interventions intended to mitigate the impact.

**Research** on the mental health consequences of economic crises has taught us that there is a significant relationship between severe economic recession and population-level psychological distress, including the emergence, and worsening, of mood, anxiety and substance-related disorders and suicidal behavior. Risk factors for suicidal behavior include social isolation, economic worries, heightened anxiety and guilt about exposing others to the virus or not doing enough to help others.

In the same way, **past economic crises** around the world resulted in greater demands for general medical care, greater use of prescription drugs and an increase in hospital admissions for mental illness. As with other mass traumatic events in countries around the world, COVID-19 is expected result in posttraumatic stress disorder (PTSD) in a proportion of South Africans, who will present with characteristic **features** of:

- Hypervigilance associated with one's health, which be coupled with marked anxiety about safeguards and protective measures to avoid infection;
- Intrusive thoughts about being infected, one's health and fears of dying;
- Avoidance and withdrawal; and
- Negative mood and cognitions - due to fears of the world changing and the future being bleak

All these symptoms can be subjectively distressing and have a persistent impact on day-to-day functioning.

**Substantial and long lasting impact of quarantines**

In the past 20 years, quarantines have also been >>

# Let's not forget about the pervasive mental health impact and let us act

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The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak continues to ravage populations around the world.

Global sex-disaggregated **data** indicate that more men than women are dying from COVID-19,

contributed to in part by disproportionately higher rates of hypertension, and cardiovascular and respiratory disease in men, although it is, as yet, unclear whether gender differences extend to infection rates and vulnerability to the disease.

If emerging evidence in other countries is anything to

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imposed during other infectious disease outbreaks, for example in China and Hong Kong during the SARS outbreak (2002-2004) and in West Africa (2014-2016) during the Ebola outbreak. A recent [review](#) of 24 studies of the psychological impact of quarantine during the SARS, MERS, H1N1 and Ebola epidemics, among others, found that the impact of quarantine was substantial and long-lasting.

COVID-19 is expected to result in posttraumatic stress disorder (PTSD) in a proportion of South Africans.

This pandemic, like other pandemics, shares [features](#) of unpredictability, widespread community impact, mass fatalities, and persistent effects.

The stress, fear and emotional pain induced by the rapid and aggressive spread of infection, coupled with the scale of prolonged grief linked to the sudden and massive loss of life, will be felt for years to come, not only by current generations but by successive

Quarantines were found to contribute to after-effects such as:

- Posttraumatic stress symptoms;
- Depression;
- Alcohol abuse and dependence;
- Poorer mental health, with PTSD specifically associated with a longer duration of quarantine

In addition, common stressors endorsed during quarantines in previous infectious diseases outbreaks included:

- A longer period of quarantine;
- Fears of being infected;
- Frustration;
- Boredom;
- Shortage of supplies;
- Inadequate information from public health authorities;
- Financial loss; and
- Stigma.

Many of these stressors are also being endorsed during the current pandemic.

### **Intergenerational trauma**

In the face of the restrictions and accompanying economic hardship, South African youth and persons with pre-existing mental illness may be especially hard hit by the potentially severe and long-term mental health consequences of COVID-19.

generations.

Exposure to prolonged and unpredictable stressful life events in children and adolescents is associated with disrupted neurodevelopment, social, emotional, and cognitive impairments, medical and psychiatric disorders, disability, and even premature death in adulthood. (In South Africa, children and adolescents make up a third of the population)

**e**xcessive and prolonged stress can induce changes in our genes by altering their expression, and these changes can be passed on to future generations, with wide-ranging and damaging health effects.

In other words, the enduring stress of the current COVID-19 pandemic may result in the [continuation of disadvantage](#) through enduring genetic changes, passed on by parents to a future generation.

### **Mental health impact to risk groups**

From a public mental health perspective, it is critical to identify and address the mental health impact of COVID-19 on the population at large. Particular attention needs to be given to risk groups that include, but are not limited to, health care workers, women, youth, the elderly, and the mentally ill. Other groups such as refugees, migrants, and people living with disabilities are equally important and should not be forgotten.

### **Health care workers**

South African health care workers managing patients with COVID-19 will face many of the challenges experienced by health care workers in other parts of the world. This [includes](#) coping with the scale of disease and death, shortages of staff and essential resources, grief, and moral distress associated with the rationing of ventilators and other factors.

**a**gainst the backdrop of high infection risk and inadequate infection protection, emerging [studies](#) on the mental health impact of COVID-19 in health care workers in Wuhan, China found that health care workers faced enormous work pressures, overwork, exhaustion, frustration, discrimination, isolation, and lack of contact with their families. These pressures were associated with symptoms of stress, anxiety, depression, insomnia, denial, anger and fear - negatively impacting work ability and decision-making capacity. In addition to working in unsafe, under-resourced and morally distressing situations, the emotional distress in Chinese health care workers was further exacerbated by uncertainty in the face of clinical management guidelines that are evolving, ambiguity about the trajectory of the pandemic, and concerns about short and longer-term medical outcomes.

In view of the potential impact on the mental health of South African health care workers, addressing work and health concerns, proactive monitoring of healthcare workers' wellbeing and instituting measures to foster resilience, will be key to delivering high-quality safe and effective care.

A concerted effort on the part of hospital management and clinical leaders will be required to:

- Make health care workers feel valued;
- Manage work expectations with

compassion;

- Communicate clearly and efficiently on COVID-19 protocols and clinical guidelines;
- Ensure the provision of sufficient personal protective equipment and resources;
- Create safe spaces to encourage open dialogue;
- Provide informational resources on managing stress and burnout;
- Identify mental health professionals who are available to provide assistance, and
- Cultivate a supportive work culture.

### **Women**

During the lockdown, women disproportionately bear the burden of childcare, home schooling, and domestic chores. They are also more vulnerable to intimate partner violence which has seen an increase during the COVID-19 pandemic. It is also important to bear in mind that mood and anxiety disorders are at least twice more [prevalent in women](#) compared to men.

For women with pre-existing psychiatric disorders, the stress and unpredictability of the situation, and the serious risk that COVID-19 poses to self and family, can trigger a relapse of anxiety and depression. In addition, limited access to women's health services, including obstetric care and sexual and reproductive services, may further add to

the psychological stress and distress that women may experience during confinement.

Evidence from a [study](#) that assessed PTSD symptoms in residents in Wuhan (China) and surrounding cities one month after the December 2019 COVID-19 outbreak revealed that women compared to men were disproportionately affected by symptoms of PTSD stemming from COVID-19, which included re-experiencing symptoms, negative >>

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alterations in cognition or mood, and hyper-arousal.

### Children

Although relatively fewer children and adolescents are infected with SARS-CoV-2 compared to the general population, children can be vectors of transmission and, as such, play a role in the spread of SARS-CoV-2 in families and communities. The physical, social, and mental health needs of children and their families must be factored into measures that are implemented to mitigate against the long-term effects of this trauma.

In a [study](#) of mental health related to the SARS pandemic in 2003 and the Swine Flu pandemic in 2009, 30% of isolated and quarantined children and 25% of isolated or quarantined parents showed clinically relevant symptoms of posttraumatic stress disorder (PTSD). Moreover, posttraumatic stress scores, indicating symptom severity, were four times higher in children who had been quarantined compared to those who had not been quarantined.

**f**amily conflict during the period of lockdown may be intensified as parents need to juggle work from home, whilst caring for children. Consequently, children and adolescents over this time may experience fear and sadness and should

be given the freedom to communicate their distress in a safe and supportive environment.

Particularly worrying is that this is a time when children may be more vulnerable to abuse and violence in the home as well as face greater exposure to online abuse. During the Ebola outbreak in West Africa in 2014 to 2016, school closures contributed to spikes in child neglect, sexual abuse and teenage pregnancies.

It is important that parents identify and monitor children's emotions, validate these emotions, provide reassurance, regularly connect with their children during the lockdown, re-establish routines as a family, and limit media exposure to COVID-19.

### The elderly

In South Africa, approximately 10% of the population is 60 years or older. This age group has a heightened susceptibility to COVID-19 infection and a high mortality once infected. The rapid transmission of SARS-CoV-2 and the high death rate could exacerbate the risk of mental health problems and worsen existing psychiatric symptoms, further impairing [daily functioning](#) and cognition in the elderly. Given that quarantine and public transport restrictions affect access to health services,

older people in South Africa are likely to be more marginalised with regard to accurate information and facts about the COVID-19 pandemic, and may have less access to community-level COVID-19 screening and testing that is currently being rolled out in the country.

These challenges may be even greater in the face of pre-existing psychiatric conditions, such as dementia. Elderly with [dementia](#) may, by virtue of their memory loss, have difficulties in remembering personal protective procedures, such as hand and respiratory hygiene, and understanding public health warnings, which could expose them to a higher risk of infection.

**I**n addition, older people in old age homes are often highly dependent on the support from carers in maintaining their daily routines, staying active, and receiving meals. Diminished support, coupled with the lack of visitation by, and face-to-face contact with, family members may increase fear, anxiety, and mistrust.

### Patients with mental illness

Patients with mental illness, in view of their compromised mental states, disorganised behavior, impulsivity, suboptimal self-care and impaired insight, may not be in a position to exercise infection prevention control measures and protect themselves in the face of COVID-19. Added risks during the pandemic also include existing social isolation, loneliness, homelessness, and poorer physical health in patients with serious mental illness, e.g., schizophrenia, bipolar illness.

As a result of the high rates of co-occurring physical illness, such as hypertension, diabetes and cardiovascular disease, which occurs at a rate that is at least two times higher than the general population, patients with mental illness have a heightened vulnerability to developing COVID-19 pneumonia and other complications.

Furthermore, the high co-occurrence of overweight/obesity, lack of exercise and other unhealthy lifestyle factors associated with psychiatric illness, and the

side effects of psychotropic medication, cannot be underestimated.

During the pandemic, patients with serious mental illness will need [assistance](#) with maintaining healthy habits, including diet and physical activity, as well as self-management of chronic mental and physical health conditions.

As was the [case](#) in Wuhan and many other cities in China, lockdown measures and suspension of public transportation were significant barriers to psychiatric patients accessing care and obtaining monthly maintenance psychotropic medication from hospital outpatient clinics that were often distant from their homes. Logistical challenges for suspected and confirmed cases were managed using a three-pronged approach:

- Establishing a 30-bed ward in an infectious disease hospital for psychiatric patients;
- Setting up isolation wards in psychiatric hospitals for psychiatric patients with suspected and confirmed COVID-19, which carried the risk of nosocomial (hospital-acquired) infection; and
- Establishing temporary quarantine hospital facilities 'Fang Cang', by converting gymnasiums, exhibition and sports centres for this purpose, to manage clinically stable psychiatric patients with mild-moderate symptoms of COVID-19 infection

### The way forward

**g**iven the potential mental health impact of COVID-19, a comprehensive set of multi-sectoral interventions targeting mental health, well-being and resilience will be needed in this country, during the lockdown and through the different stages of this evolving pandemic, both for the general population and for vulnerable groups.

We can certainly learn from the successes and challenges of other countries who are already deeper into this crisis. As this is a novel, ravaging and little known virus, it is prudent that we over-estimate rather than under-estimate the mental health sequelae of this disease and the resources that will be required. ■