

Briefing paper

COVID-19 and mental health: immediate and long-term impacts

Contents

Summary	3
Aims of this paper	4
The pre-pandemic state of mental health	4
Impacts of COVID-19 on mental health	4
Impact on the population at large	5
Impact on particular groups	5
Economic determinants for mental ill health	7
Timeline for the mental health consequences of COVID-19	7
Impact of mental health on COVID-19 response and recovery	7
Potential impact of mental ill health on short- and medium-term suppression of COVID-19 through existing measures	
Potential impact of mental ill health on long-term suppression of COVID-19 and recovery	9
Mental Health and 'Building Back Better'	9
Leveraging innovation and opportunities for change	10
Conclusion: Integrate mental health in COVID response and recovery	11
References	12

About Bond

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About the group

The Bond Mental Health and Psychosocial Disability Group is sub-group of the Bond Disability and Development group for organisations working on Mental Health or interested in engaging in this area. The group provides a forum for Bond members to share, learn and discuss mental health and the rights of people with psychosocial disabilities in both policy and practice. It also supports and influences the work of relevant UK agencies, including DFID and the UK Parliament on Mental Health and psychosocial disability.

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Summary

Prior to COVID-19, the world was not equipped to respond to the mental health needs of populations around the world, despite the high burden of disease, a large treatment gap, and vast economic losses due to mental ill health. Mental health was not a political priority and was chronically under-funded in most countries.

Today COVID-19 is exacerbating pre-existing inequalities, including those surrounding mental health and people with psychosocial disabilities. The pandemic is affecting the mental health of entire populations, and - especially - that of already at-risk groups (e.g. the very poor, people with all disabilities, those with existing health and mental conditions, frontline workers, women, children and older people). Moreover, the mental health impacts of COVID-19 will extend well beyond the end of the pandemic phase - affecting the ability of societies and individuals to recover - with long term developmental impacts on the lives of the current generation of young people in particular.

While optimal suppression of the spread of COVID-19 must be a public health priority, governments are having to pay attention to the economic and mental health consequences on the population of these measures, and make difficult decision balancing these considerations. However, there is emerging evidence that can guide these decisions. With appropriate planning and investment, measures to address population mental health can contribute to efforts to slow the spread of transmission. If not properly considered, mental ill health, through various mechanisms, can increase risks of viral spread (e.g. through pursuing more risky behaviours), or lead to 'reservoirs' of continued infection where neglected populations are unable to access public health measures, including vaccination.

Therefore, this moment presents an ideal opportunity to invest in integrating mental health as a core part of the COVID-19 response: to provide emergency care for populations impacted by COVID-19; to "build back better" and improve care delivery following the pandemic, leveraging the rapid pace of innovation during the pandemic; to support COVID-19 control and suppression; and, finally, to improve health system and societal resilience against future pandemics.

In the UK, DFID/FCO and INGOs, can use relationships with institutions including the World Bank, WHO and other UN agencies responding to COVID-19, along with the Global Fund and Global Financing Facility to help action this agenda by encouraging them to integrate mental health in their COVID-19 response and recovery plans and in longer-term Universal Health Coverage efforts. Echoing the call from the UN Secretary General, the need for urgent action needs to be heeded by international and national stakeholders;

"As we recover from the pandemic, we must shift more mental health services to the community, and make sure mental health is included in universal health coverage.

The United Nations is strongly committed to creating a world in which everyone, everywhere, has someone to turn to for psychological support.

I urge governments, civil society, health authorities and others to come together urgently to address the mental health dimension of this pandemic.

And I call on governments in particular to announce ambitious commitments on mental health."

UN Secretary General, Antonio Guterres¹

Mental health and COVID-19

Aims of this paper

This paper provides a summary of the (emerging) body of evidence on two topics: the impact of COVID-19 on peoples' mental health and wellbeing; and, conversely, the projected impact of mental health on the efficacy of COVID-19 prevention, treatment and control measures. It explains why it is important to rapidly invest in mental health, both to support populations impacted by COVID-19, and to achieve successful control and eventual long-term suppression of the pandemic, 'building back better' societies and economies.

The pre-pandemic state of mental health

Even prior to COVID-19, the world was not equipped to deal with mental ill health. Mental health conditions account for 13% of the global burden of disease. Prior to COVID-19 there were an estimated 264 million people with anxiety, and 322 million with depression worldwide. In addition, there are nearly 800,000 suicides per year globally, and suicide is the second leading cause of death in young people aged 15-29. Sadly, most people who need treatment in low- and middle-income countries do not receive it. Where they do exist, services can sometime be of poor quality, or abusive and not respect autonomy or choice. Recent research has shown that potentially as few as 1 in 27 people in low-/lower-middle-income countries receive minimally adequate treatment for depression; and in many low-income countries, there are fewer than 1 mental health worker per 100,000 of the population.

As well as personal suffering and social exclusion, mental ill health costs the world economy approximately US\$2.5 trillion per year in reduced economic productivity and physical ill health. This cost is projected to rise to US\$6 trillion by 2030 alongside increased social costs. Yet, less than 2% of national health budgets globally are spent on mental health. Of that, over 80% goes towards running inpatient psychiatric institutions in LMICs. This chronic underinvestment, unless rapidly corrected, will make the timely attainment of the SDGs impossible.

Impacts of COVID-19 on mental health

There is a growing body of evidence of the impact of COVID-19 on people's mental health and well-being, both for the population at large, as well as on specific at-risk groups.

While there is some evidence of (relatively uncommon) short-term neurological issues such as confusion and hallucinations among COVID-19 patients, the vast majority of the population will experience at least some impact of COVID-19 on their mental health due to the heightened stress or anxiety triggered by concerns regarding the threat to their health (anxiety of contracting the disease); the impact of social isolation and other control measures (lack of personal contact, difficulty accessing services and supports), or the impact of loss of income and the wider indirect impacts of the economic downturn.

As well as the person affected by COVID-19, poor mental health may impact the people around them: declining mental health can lead to an increase in substance misuse, interpersonal violence, and difficulties in maintaining responsibilities, including work, and caring and supporting families. For example, a decline in parental mental health can have a direct impact on early childhood development including lower birth weights, and poorer neurological development.

Impact on the population at large

There is emerging evidence from around the globe that rates of distress, depression and anxiety have increased in affected populations. For instance, national surveys in China and Iran have revealed prevalence of 'distress' of between 35% and 60% of the population; and a study in Amhara Regional State, Ethiopia, in April 2020, reported an estimated 3-fold increase of symptoms consistent with depressive disorder vs estimates from Ethiopia before COVID-19, to 33%. VII In addition, other indicators of well-being are also showing deterioration, e.g. alcohol misuse. A recent study from Brazil found a near-doubling of online alcohol sales between late February and early May, as compared to 2019. VIII

In addition, there is considerable evidence from previous emergencies (including outbreaks like Ebola Virus Disease) that rates of distress and mental conditions substantially increase, and that there are widespread impacts at a personal, community and national level. ix

Impact on particular groups

COVID-19 has had a particularly detrimental impact on certain groups: in the case of mental health, attention must be paid to 'leave no one behind'.

Frontline workers are vulnerable to increased stress, burn-out, depression, and PTSD. A study among healthcare workers in China during the COVID-19 pandemic showed the frequency of depression (50.4%), anxiety (44.6%), insomnia (34%), and distress (71.5%).* This impacts the individual but also the collective response to COVID-19 due to the incapacity or reduced capacity of the frontline workers affected. It has potentially significant impacts on the ability of societies to continue to respond to COVID-19 for the duration of the pandemic and to restore public health services after the pandemic. As reported recently in the British Medical Journal, in the context of comparison between Ebola and COVID-19: "Burnout is associated with a suite of negative outcomes in addition to workforce departure: provider depression; reduced quality of patient care; interpersonal conflict, among others. In the midst of a pandemic, we simply cannot afford this".xi

People with pre-existing mental health conditions and associated psychosocial disabilities are facing a number of risks, including increased rates of mental ill health and disruption to treatment, medications and the lifeline of support services. For example, in Buenos Aires, Argentina, a neurological institute reported an over 99% reduction in patient encounters since COVID-19.^{xii} In addition, persons living in institutions (or institution-like facilities) may be at higher risk of infection due to cramped conditions, ^{xiii} may not have the same access to care as non-institutionalised persons, ^{xiv} and may be at an even higher risk of mental ill health due to reductions in access to visitors or exercise breaks. Conversely, while deinstitutionalization programmes are welcome (e.g. closing psychiatric institutions and children's homes, or freeing prisoners in a bid to reduce the spread of infection), they also carry significant risks, to patient safety and well-being^{xv} and potentially to COVID-19 transmission, if not carried out well.

Women are under particular stress during the pandemic as carers of the sick, bearers of the main burden of childcare, continuing work and as COVID-19 patients themselves. A survey on stress levels in the Indian population during the COVID-19 pandemic showed that "66% of women reported being stressed as compared to 34% of men".^{xvi} In addition, isolation and lockdown has also resulted in increases in violence against women, with estimates that globally "31 million additional cases of gender-based violence can be expected to occur if lockdown continues for at least six months".^{xvii} Access to support is significantly curtailed during the lockdown, particularly when women are closely monitored at home. Disruption in access to contraception may result in increased rates of unwanted pregnancies, negatively impacting on family planning efforts.^{xviii}

Children's short- and longer-term development - including brain development - is being impacted by stress, social isolation, and lack of exercise, with young children at risk of developing lifelong challenges due to prolonged exposure to toxic stress and by deprivation in nutrition, stimulation and health care. The worst consequences will be experienced by the most vulnerable children, with a global estimate that "42-66 million children could fall into extreme poverty as a result of the crisis this year". In addition, although more than two-thirds of countries have introduced a national remote learning platform to compensate for disruption of education, "among low-income countries the share is only 30%". xix

Adolescent girls will fall further behind in learning and development with school dropout rates likely to be largest among girls, along with rising rates of adolescent pregnancies and early marriage. Adolescent pregnancy is a significant risk factor for mental ill health affecting both the mother and child. Pregnant adolescents are 2-9 times more likely to develop perinatal depression and perinatal depression has a detrimental impact on parenting, family functioning, parent-child relationships, and children's physical, social, behavioural health, and cognitive functioning. XX, XXI Higher estimates of Postpartum Depression are also reported in adolescent mothers (26-50%). XXII This has led to calls for the Global Financing Facility to better integrate mental health into its programming for women and children, in order to reduce these intergenerational impacts. XXIII

Refugees, migrants and people on the move are experiencing extraordinary levels of stress due to insecurity of housing and food, combined with hopelessness associated with their insecurity. Even prior to COVID-19, recent research found that "approximately one in five people in post-conflict settings has depression, anxiety disorder, post-traumatic stress disorder, bipolar disorder, or schizophrenia... in contrast to data from Global Burden of Disease 2016, which suggest a mean global prevalence of one in 14".xxiv During the COVID-19 period, early results from Indonesian migrant workers in China show that 1 in 4 migrants (26.9%) screened positive for anxiety and roughly 1 in 3 (31.8%) screened positive for depression during the pandemic.xxv Lockdown policies and economic stress have led to large numbers of people, mainly poor and informal workers, having to leave cities and return to rural homes, for example in India and Peru - often traveling by foot and enduring huge hardship (and incidentally, risking taking infection from cities to rural areas).

COVID-19 patients are impacted by the fear, anxiety and uncertainty about their condition, as well as the physical discomfort and separation from loved ones. As was the case with Ebola (and many Neglected Tropical Diseases), survivors of COVID-19 infection experience stigma and exclusion in many countries. A study among hospitalised patients in China showed that 35% of patients had symptoms of anxiety and 28% of depression. The long-term recovery for patients involves both physical and mental health recovery. One of the most challenging aspects of societal healing post-Ebola was the stigma faced by patients and by caregivers. Community Healing Dialogues - for example - were a successful intervention to overcome this stigma and help improve reintegration.

Older adults are at high risk of mental ill health, especially those with dementia, due to the anticipated long periods of social distancing and the accompanying isolation and loneliness. According to a briefing by Alzheimer's Disease International, "due to cognitive impairment, people living with dementia have a greater risk for COVID-19 exposure. Memory problems make instructions problematic to remember. For example, it can be difficult to understand instructions about physical distancing, hand hygiene, restrictions on walking outside, or reasons for wearing a mask. Eventual lack of insight can result in behaviour that increases risk of exposure for themselves and for their families and carers."xxviii As with other vulnerable groups (noted above) those living in institutions, are impacted by rapid deinstitutionalization policies, increased risks of infection and increased isolation. There is also a high risk of discrimination against the elderly in some societies, which has already led to the defence of the elderly's right to life and an equal right to treatment in the context of limited resources.xxix

Economic determinants for mental ill health

There is a strong reinforcing association between poverty, inequalities and poor mental health; and due to COVID-19, the world is facing huge economic disruption. The potential impact on people in weak economies is particularly stark. "Most of the labour force in low- and middle-income countries is informal: 53% in Latin America, 68% in Asia-Pacific, and 86% in Africa. People will go hungry overnight if they cannot work as they depend on daily income, meaning that lockdowns, closure of businesses and similar measures are particularly detrimental these groups. Governments lack resources for palliative measures, and even if they create them by printing money or acquiring debt, they lack effective disbursement and control mechanisms." This may result in 84 - 132 million people being pushed into extreme poverty (PPP \$1.90 a day). There is evidence that measures like cash transfer can be beneficial for mental health, to it is essential when they are used that measures are put in place to ensure that marginalised populations are not excluded.

Such stark economic determinants will undoubtedly have a major impact on the mental health and well-being of entire populations. Figures are already beginning to emerge for COVID-19. In Pakistan, nearly 60% of individuals have experienced anxiety, depression or tension due to COVID-19, according to a survey by Taskeen / Ipsos - driven primarily by financial and employment concerns. Moreover, previous economic crises have shown that prolonged economic downturns may have a substantial impact not just on morbidity, but also on direct mortality due to mental ill health, for example through the rise in suicide, or "deaths of despair". XXXXIV

Timeline for the mental health consequences of COVID-19

The detrimental mental health effects are likely to last beyond the end of the virus pandemic. This will be driven both by the direct impact of COVID-19 on its survivors; as well as the social and economic aspects of the pandemic that will continue to act as stressors on communities, such as the economic downturn, or the longer-term developmental impact on children (see above). For instance, although limited data exists on the mental health impact of COVID-19 on survivors of the disease, its emotional impact can be proxied by studies of mental health SARS / MERS patients. A recent study of the SARS and MERS epidemics found that (p. 13) "after recovery from the infection, sleep disorder, frequent recall of traumatic memories, emotional lability, impaired concentration, fatigue, and impaired memory were reported in more than 15% of patients at a follow-up period ranging between 6 weeks and 39 months ... The point prevalence of anxiety disorders, depression, and post-traumatic stress disorder were high".xxxx

Impact of mental health on COVID-19 response and recovery

The link between mental health and physical health is well-documented. The impact of the pandemic on mental health can be approached through two lenses: the link between mental ill health and the shortand medium-term suppression and control of COVID-19 through existing measures; and the link between mental ill health and the potential long-term suppression of the disease through vaccination.

Potential impact of mental ill health on short- and medium-term suppression of COVID-19 through existing measures

In the short-term, to keep the healthcare system operational, it will be key to ensure that frontline health (and other essential) workers are protected and supported regarding their mental health (see above). Their mental health is paramount to sustaining the response and recovery.

To control the spread of the infection more broadly, it will be important to maximise adherence to the risk-reduction protocols across the population. This will require additional interventions and investment in support for people with poor mental health, who may be less likely to follow epidemiological guidelines than people in good mental health or without mental health conditions.

The link between poor mental health and lower compliance with medical advice and guidance / higher-risk behaviour is well-established in general. For instance, HIV is 4 times more prevalent in people with poor mental health, driven by the fact that people with poor mental health may take more risks in their sexual behaviour and substance misuse. Moreover, following HIV diagnosis, people with poor mental health have a higher probability of transmission, due to ongoing high-risk sexual behaviour and limited adherence to treatment and follow-up. xxxvi Similar behaviours can be observed in TB patients, whereby those patients with depression are 10 times more likely to stop their treatment; and in patients for other conditions (e.g. cancer, end-stage renal disease, rheumatoid arthritis), where depressed patients are 3 times more likely to be noncompliant with medical treatment recommendations. XXXVIII This has led to calls for better integration of mental health in HIV and TB programmes. XXXXIX

The same holds true in an epidemic setting, as was shown recently using data from the Ebola epidemic. One study, conducted at the height of the Ebola epidemic (January-April 2015), found that "higher scores on measures of PTSD symptoms and depression were associated with higher Ebola Virus Disease (EVD) risk behaviours, and symptoms of PTSD were associated with lower levels of EVD prevention behaviours". XI While another study on integrating psychosocial support (PSS) in the treatment of Ebola, conducted in Sierra Leone and Liberia, mentioned that PSS teams were involved in working with patients who were refusing to eat, showing withdrawal or disengagement in care, and those resisting treatment. XII Early research during the COVID pandemic showed similar impacts on risk behaviour, especially among young people, who were less likely to follow health advice if they had anxiety or depression.

The focus on vulnerable groups, including people with poor mental health, is also key to minimising the risk of 'second waves' or resurgence of infection. An example of how a marginalised group can create such a resurgence has been recently observed in Singapore. As the Guardian reported in April 2020, while in mid-March the outbreak appeared to be under control (just 200 recorded infections), in April "the number of cases surpassed 10,000", with "almost all new reports involv[ing] migrant workers", typically housed in overcrowded and unsanitary dormitories. A similar situation persists in refugee camps, where overcrowded and unsanitary conditions could become the 'epicentres' of new outbreaks. A similar situation persists in refugee camps, where overcrowded and unsanitary conditions could become the 'epicentres' of new outbreaks.

A similar effect may take place in mental health institutions. As recently argued in Lancet Psychiatry, "when epidemics arise, people with mental health disorders are generally more susceptible to infections ... Possible explanations include cognitive impairment, little awareness of risk, and diminished efforts regarding personal protection in patients, as well as confined conditions in psychiatric wards". **Iiv Early examples of COVID-19 'hotbeds' are the Wuhan Mental Hospital (reporting a cluster of 50 cases among its inpatients in early February), **Iv as well as the Life Care Centre nursing home in Washington, dubbed 'ground zero' for the pandemic.**

As the African Union Commissioner for Social Affairs, Amira El Fadil, said in a recent webinar: "COVID-19 won't end anywhere until it ends everywhere; no-one is safe until everyone is safe".

Potential impact of mental ill health on long-term suppression of COVID-19 and recovery

To maximise the impact from this investment, when / if a safe and efficacious vaccine for COVID-19 is created, it will be key to ensure the broadest possible uptake in populations across the world.

Unfortunately, mental ill health could have a negative impact on this, as there is a growing body of evidence to suggest a link between poor mental health, and lower vaccine uptake rates. This is the case both in higher-income settings, xlvii and in lower-income settings. As a result, it will be important to invest in people with poor mental health to optimise the chances of a long-term, stable suppression of COVID-19. For instance, a longitudinal study in Pakistan found that: "Infants of depressed mothers were less likely to be fully immunized at 12 months compared with infants of nondepressed mothers, possibly indicating a lack of appropriate health-seeking behaviour in depressed mothers". xlviii The Thinking Healthy Programme in Pakistan that targets the prevention and treatment of maternal mental health explicitly aims to improve child immunisation rates as a measure of the success for the programme. xlix

Simlar findings have been identified directly for patients with a mental health condition. Based on a 2010 examination of studies on the quality of care in those with and without comorbid mental illness, the largest number of studies suggested inferior preventive health care in those with a mental illness. For example, one study found that "those with depression were more likely to have not had an influenza vaccination"; while another found that "those screening positive for distress ... were less likely to have an influenza vaccine". It

More broadly, **population trust in authorities disseminating messages or interventions** like vaccines has been repeatedly shown to be central to uptake. Unfortunately, mistrust can even result in attacks on health workers like vaccine distributors (eg polio in Nigeria and Pakistan, or Ebola in DR Congo). Increased population anxiety and fear is likely to foster greater levels of suspicion and proliferation of anti-authoritarian conspiracies and a rise of support for eg anti-vaccine campaigns (including online).

Mental Health and 'Building Back Better'

Investing in mental health will be a key part of the economic recovery for nations. Due to poor mental health 12 billion productive days are lost each year, iii costing the world economy approximately US\$2.5 trillion per year in reduced economic productivity and physical ill health (WHO Mental Health Atlas). This cost is projected to rise to US\$6 trillion by 2030 alongside increased social costs. LMICs are expected to bear 35% of this cost. iiii

A recent study across 36 countries across all income levels investigated the return on investment from scaling up the treatment of depression and anxiety. The study found a linear increase in treatment coverage between 2016 and 2030 could generate an estimated US\$230 billion in productivity gains and US\$310 billion in the value of extra healthy life years. The return on investment for all country income groups is overwhelmingly positive. For low- and middle-income countries in particular, scaling up of depression and anxiety treatment generated ~\$4 in economic benefits for each \$1 invested, and ~\$5 when the intrinsic value of health returns were also taken into account.

Unfortunately, the majority of the meagre funding dedicated to mental health is spent on institutions that have limited therapeutic value, and often restrict human rights. **COVID-19** is a potential opportunity to radically, and positively, reform mental health policies and provision for the future. Countries can be encouraged - as already advocated by WHO and other experts - to move from institutional to community-based care. In the words of Dainius Puras, UN Special Rapporteur on the Right to Health: "We need to use this moment to press for accelerating deinstitutionalisation", This would bring huge societal and individual benefits, strengthen the rights of those with mental ill health, and help reduce the spread of COVID-19. Indeed, there is a track record of countries improving

their mental health system in response to emergencies or pandemics, including during and after Typhoon Haiyan in the Philippines (with a DFID-funded initiative that led to radical reforms and a strengthened national system), and systemic, long-lasting reforms in Ebola-affected countries. Vi

Leveraging innovation and opportunities for change

One other potentially positive aspect of COVID-19 has been the rapid introduction and scale up of new technologies and approaches to deliver mental health care. For example, on the technological side, there has been an accelerated move towards telehealth (e.g. via help-lines, social media and messaging platforms, radio, and videos) with countries such as Kenya reporting an investment in telecounselling that it intended to remain in operation for the long term (beyond the pandemic). Outside of technology, there has been a shift to peer to peer counselling and task shifting from psychiatrists to psychologists (e.g. Kenya) and from mental health specialists to community based workers. Viii Looking forward, it is key to ensure that these rapid gains are embedded in routine, sustainable practice as this will dramatically expand access to mental health services.

More broadly, the extensive evidence generated for effectiveness of services reform around task shifting and decentralisation has often been put in place during, and immediately after, emergencies. This is in part because of the increased needs during emergencies fostering innovative response, and because times of rapid change can create shifts in political will. We have already seen this strong public and political interest in mental health during the COVID outbreak, with government and civil society leaders showing great ingenuity in responding to the needs of their populations, ensuring that no-one is left behind. Iix

Conclusion: Integrate mental health in COVID response and recovery

The opportunity to invest in mental health is now: to positively provide appropriate support for populations impacted by COVID-19; to "build back better" and improve care delivery following the pandemic; and to support COVID-19 control and suppression.

Governments can be supported by ensuring that evidence related to promoting and protecting mental health is integrated into COVID-19 response plans, informing rational and appropriate decision-making.

This is also the opportunity to implement the recommended actions and interventions from the WHO Mental Health Action Plan, which includes interventions that can be delivered in a low-resource setting; particularly utilising the current intense focus on improving health provision to leap forward. Ixi

Specific actions include:

- 1. Following the recommendations in the UN briefing paper on COVID-19 and mental health:
 - apply a whole of society approach to promote, protect and care for mental health,
 - ensure widespread availability of accessible emergency mental health and psychosocial support,
 - support recovery from COVID-19 by building mental health services for the future.
- 2. Supporting sustainable acceleration of innovations in mental health delivery. For example, the rapid move to digital and remote care improving access, and the transition from institutional to community-based care.
- 3. Longer-term; increase integration of mental health in all sectors, and direct spending for mental health, to ensure that mental health has its proper place in universal health coverage. A recent Lancet Commission has suggested that low- and middle-income countries should aim for 5% of their health budgets to be committed to mental health lealth summit, a figure also used in the recommendations from the Global Ministerial Mental Health Summit, hosted in London in 2018. A similar proportion of Overseas Development Assistance for Health committed to mental health across sectors would go some way to reflecting the proportion of global burden of disease attributable to mental health (which stands at around 13%).

Investment in mental health will not only support response and recovery from the current pandemic; it will also provide long term benefit by mitigating indirect impacts of the long-term effect of COVID on the economy and other systems, and building preparedness and resilience for future outbreaks.

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