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SHORT COMMUNICATION

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REACH for mental health in the COVID19 pandemic: an urgent call for public health action

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ABSTRACT

Our submission is responsive to the urgent need for public mental health action prompted by the escalating COVID-19 pandemic. In it, we review the evidence calling for urgent public mental health action, propose a mental health equivalent fo the World Health Organization's 'Do the Five' concept, and describe the 'REACH for Mental Health' public health measure we have launched at the Harvard T.H. Chan School of Public Health.

REACH para la salud mental en la pandemia del COVID-19: Una exigencia urgente de acciones en salud pública

Nuestra presentación responde a la necesidad urgente de acciones en la salud mental pública debido a la creciente pandemia de COVID-19. En esta presentación revisamos la evidencia que exige acciones urgentes de la salud mental pública, proponemos un equivalente de salud mental del concepto 'Haz los cinco' de la Organización Mundial de la Salud, y describimos la intervención de salud pública 'REACH (por sus siglas en ingles) para Salud Mental' que hemos lanzado en la Escuela T. H. Chan de Salud Pública de Harvard.

针对COVID19大流行中的REACH心理健康: 紧急呼吁采取公共卫生措施

本文是对因COVID-19大流行升级而急需采取公共精神卫生行动的回应。在本文中，我们综述了呼吁采取紧急公共精神卫生行动的证据，提出了与世界卫生组织的'做到五点 (Do the Five)'概念相当的心理健康措施，并描述了我们在哈佛大学陈水清公共卫生学院共同发起的'为精神卫生提供REACH心理健康'公共卫生干预措施。我们描述了这种干预措施以支持必要的公共卫生行动，以防止随着COVID-19大流行的全面展开而引发的广泛精神卫生危机。

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HIGHLIGHTS

- COVID-19 pandemic carries all hallmarks of a traumatic event.
- Large-scale public mental health measures are needed to mitigate effects.
- "Do the Five for Mental Health" is summarized by the REACH acronym.

On 11 March 2020, the World Health Organization (WHO) officially declared the novel SARS-CoV-2 (coronavirus) disease (COVID-19) a pandemic. As of 14 April 2020, the pandemic has accelerated to a total of almost two million cases and over 120,000 deaths globally (Dong et al., 2020). In order to limit transmission of COVID-19 and reduce the growing burden on strapped health systems, public health measures such as social distancing, quarantine, and isolation have been instituted globally. The economic consequences of such measures have been devastating, resulting in massive unemployment, and a projected decline in global GDP (United Nations, 2020). The COVID-19 pandemic and its consequences have three hallmark characteristics of traumatic events: unpredictability, uncontrollability (Koolhaas et al., 2011), and the threat of death or serious injury as described in the ICD-11 (International Classification of Diseases) and DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) diagnostic criteria. There is well-established evidence showing exposures to traumatic stressors have profound effects on long-term mental and behavioural health. Notably, like other pandemics, we may defeat COVID-19 only to then face a global public mental health crisis (Neria, Nandi, & Galea, 2008). Furthermore, multiple sources of inequity including social, economic, and geographic factors promise to leave those most at risk carrying a disproportionate burden of the effects of COVID-19 – including the mental health burden (Ahmed, Ahmed, Pissarides, & Stiglitz, 2020). Breaking publications from China in the aftermath of the peak of the COVID-19 pandemic recommend that public mental health interventions be formally integrated into public health-care plans, yet there is little precedent for deploying these resources at the scale needed (Dong & Bouey, 2020). The good news is that, in the wake of the numerous human and natural disasters over the past two decades, the global mental health trauma community has developed many tools, that if deployed can mitigate the toxic effects of COVID-19 on mental health.

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Clinical and epidemiological studies of previous epidemics such as SARS and Ebola suggest profound effects on mental health, particularly on mental health outcomes known to emerge in the aftermath of trauma including posttraumatic stress disorder (PTSD), depression, and anxiety. Lam et al. (2009) found that among 181 SARS survivors, at 4 year follow up, 4.25% had at least one psychiatric diagnosis among a sample wherein only 3.3% reported a history of a pre-existing psychiatric disorder before contracting SARS. Consistent with this pattern across other epidemics, elevated rates of psychiatric symptoms have been reported in a national community sample 1 year after the Ebola epidemic in Sierra Leone, including any anxiety-depression symptom (48%) and any PTSD symptom (76%) (Jalloh et al., 2018). Emerging evidence from China suggests similar patterns of wide-ranging effects of COVID-19 on mental health. For instance, a cross-sectional study of healthcare workers across several sites in China found that 50.4% of the sample reported symptoms of depression, 44.6% anxiety, 71.5% general distress, and 34.0% insomnia; prevalence estimates were elevated among frontline workers in Wuhan, China (Lai et al., 2020). A systematic review of the mental health effects of quarantine found such measures were associated with insomnia, PTSD symptoms, anxiety, depression, stigmatizing attitudes from others, and increased use of alcohol and tobacco (Brooks et al., 2020).

The COVID-19 pandemic and the public health measures critical to containing it is associated with three factors known to be toxic to mental health: fear, social isolation and stigma. High levels of fear, distress and worry are associated with higher levels of PTSD symptoms among recovered healthcare workers during SARS (Ho, Kwong-Lo, Mak, & Wong, 2005). In the context of increasing access to online content, social media exposure is also a risk for increased anxiety during the COVID-19 outbreak. Feelings of isolation, helplessness, and reduced social integration can also increase the risk for completed suicide in vulnerable populations, such as the elderly (Yip, Cheung, Chau, & Law, 2010). Finally, stigma will also increase the risk of poor mental health, as we have seen in the SARS outbreak.

The medical community has come together in commendable ways to address the diagnostic, therapeutic, and preventive interventions needed for COVID-19. As we have learned from other public health crises, the mental health effects will remain with us for a much longer time. Several epidemiologic modelling predictions show that our lives will continue to be disrupted with continued physical distancing and social isolations. As these public health measures continue, it is critical to mobilize efforts for supporting mental health preventive and intervention strategies. With respect to physical health prevention outreach, the WHO and other public health agencies have used the 'Do the Five' to raise awareness and limit the transmission of the COVID-19.

We need a similar coordinated call to 'Do the Five for Mental Health' in the COVID-19 pandemic in order to mitigate the effects of this traumatic stress. First, recognize the problem. As noted above, the pandemic has all the characteristics of a traumatic event, with the unique aspect that its truly global and, therefore, causing widespread stress, fear and anxiety at a population level. Second, expand the social safety net based on existing evidence that buffering people from economic and other social consequences reduces the effects of the pandemic on mental health. Adverse economic events, such as unemployment and foreclosures are stressors toxic to mental health, e, g. (McLaughlin et al., 2012). Third, assist those most at risk, especially those already socially isolated, such as people with existing mental health conditions. Also, it is also critical to support families in conflict and/or with histories of domestic violence, children with special needs, people who are already isolated before the pandemic, and health-care workers. Fourth, cultivate resilience by disseminating evidence-based strategies, such as psychological first aid at a population level. Fifth, have empathy (de Waal, 2009; de Vignemont & Singer, 2006; Eisenberg, Smith, Sadovsky, & Spinrad, 2004). That is, actively practicing kindness to ourselves and to each other, to our families, to our neighbours can reduce our own stress as well as that of those around us.

At the Harvard TH Chan School of Public Health, we have deployed a public mental health intervention 'REACH for Mental Health' based on the 'Do The Five' WHO concept and informed by trauma-based theory and evidence-based disaster mental health. Further information about the global project can be found at https://www.global-psychotrauma.net/covid-19-projects.

First, to '**R**ecognize the Problem', we noticed that rising levels of uncertainty and stress called for the dissemination of basic evidence-based psychoeducational information on mental health and wellness. Second, we sought to '**E**xpand the Social Safety Net' by offering public mental health forums to the both the institutional community and the public. These forums included a combination of psychoeducation, evidence-based coping strategies, and 'question and answer' sessions via Zoom. At the time of this writing, we have offered three weekly forums, the most recent one attended by over 800 participants. All slides, recordings, and associated resources are available via the Harvard T.H. Chan website and YouTube. In the spirit of open science, the public has permission to take any of the resources created and adapt them for their own use. Third, we sought to '**A**ssist Those Most At Risk' by delivering resources targeted to vulnerable groups such as those with pre-existing mental health conditions (for example, through the National Alliance for Mental Illness [NAMI]) and a session focused on mental health disparities. This includes insuring our forums include

a global perspective, such as a panel from mental health professionals on the front lines in Sub-Saharan Africa. Fourth, we sought to '**C**ultivate Resilience' through our mental health forums by bringing evidence-based skills for managing stress and enhancing resilience, including teaching skills such as mindfulness, diaphragmatic breathing, and progressive muscle relaxation. Fifth, we sought to adhere to the foundation of '**H**ave Empathy' by integrating a message of self-compassion, tolerance and encouraging practices of altruism into our forums and public education materials.

Population mental health measures on the global scale are urgently needed, yet no precedent exists for doing so at the level necessitated by the COVID-19 pandemic. The mental health community has a deep well of experience deploying interventions that can mitigate adverse outcomes in the aftermath of a disaster, and important prior work has set a framework for taking a public health approach to trauma prevention and treatment (Magruder, Kassam-Adams, Thoresen, & Olff, 2016; Magruder, McLaughlin, & Elmore Borbon, 2017). For example, the National Child Traumatic Stress Network and the National Centre for PTSD in the USA have developed an evidence-based modular approach to help affected individuals in the immediate aftermath of a disaster (Vernberg et al., 2008). Several leading organizations including the WHO Department of Mental Health and Substance Abuse and the UNICEF (United Nations Children's Fund) have developed several resources to support the mental and psychological well-being of different target groups and front-line health-care workers. These are only a few examples of the remarkable response from the medical and public health community to address the known mental and behavioural health needs in these unprecedented times. We have a narrow window to avert a widespread mental health crisis, and doing so at the global scale driven by the COVID-19 pandemic will rely not only on the creativity and expertise of the medical and public health community, but also on strong public health leadership at the national and international level.

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