

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. Some people infected with COVID-19 have had to receive intensive care in hospital. A new environment can lead to increased stress and behavioural problems.⁷ Delirium caused by hypoxia, a prominent clinical feature of COVID-19, could complicate the presentation of dementia⁸, increasing the suffering of the people living with dementia, the cost of medical care, and the need for dementia support.

During the COVID-19 outbreak in China, five organisations, including the Chinese Society of Geriatric Psychiatry and Alzheimer's Disease Chinese, promptly released expert recommendations and disseminated key messages on how to provide mental health and psychosocial support.⁹ Multidisciplinary teams started counselling services free of charge for people living with dementia and their carers. These approaches minimised the complex impact of both COVID-19 outbreak and dementia.

As recommended by international dementia experts and Alzheimer's Disease International,¹⁰ support for people living with dementia and their carers is needed urgently worldwide. In addition to physical protection from virus infection, mental health and psychosocial support should be delivered. For example, mental health professionals, social workers, nursing home administrators, and volunteers should deliver mental health care for people living with dementia collaboratively. Within such a team, dementia experts could take the lead and support team members from other disciplines. Self-help guidance for reducing stress, such as relaxation or meditation exercise, could be delivered through electronic media. Service teams could support behavioural management through telephone hotlines. Psychological counsellors could provide online consultation for carers at home and in nursing homes.¹¹ In addition, we encourage people who have a parent with dementia to have more frequent contact or spend more time with their parent, or to take on some of the caregiving duties so as to give the carer some respite time.

China has contained the epidemic, and business is starting to return to normal. We believe that learning lessons from China would empower the world to tackle the COVID-19 pandemic, with little risk of compromising the quality of life of people living with dementia and their carers.

HW reports lecture fees from Eisai China and Lundbeck China and owns the copyright issued to the Neuropsychiatric symptoms individualised management system. SG is a scientific advisory board member for TauRx, Biogen, and Bohringer Ingelheim and a data-safety monitoring board member for ADCS, ATRI, and Banner-Health. HB reports personal fees from Nutricia Australia. JLM reports consultancy fees from Genentech, Novartis, Lundbeck, Oryzon, Biogen, Lilly, Janssen, Green Valley, MSD, Eisai, Alector, ProMIS Neurosciences, Roche Diagnostics, GE Healthcare, and BioCross and grants from Innovative Medicines Initiative-EPAD, Innovative Medicines Initiative-AMYPAD, and La Caixa Foundation. All reported financial activities are unrelated to this Correspondence. All other authors declare no competing interests.

*Huali Wang, Tao Li, Paola Barbarino, Serge Gauthier, Henry Brodaty, José Luis Molinuevo, Hengge Xie, Yongan Sun, Enyan Yu, Yanqing Tang, Wendy Weidner, *Xin Yu huali_wang@bjmu.edu.cn; yuxin@bjmu.edu.cn

Dementia Care and Research Center, Peking University Institute of Mental Health (Sixth Hospital), Beijing Dementia Key Lab, Beijing 100191, China (HW, TL, XY); NHC Key Laboratory of Mental Health, National Clinical Research Center for Mental Disorders (Peking University), Beijing, China (HW, TL, XY); Alzheimer's Disease International, London, UK (PB, WW): McGill Center for Studies in Aging, Douglas Mental Health Research Institute, McGill University, Montreal, QC, Canada (SG); Centre for Healthy Brain Ageing, School of Psychiatry, University of New South Wales, Sydney, NSW, Australia (HB); Barcelona Beta Brain Research Center, Pasqual Maragall Foundation, Alzheimer's Disease and Other Cognitive Disorders Unit, ICN Hospital Clinic i Universitari, Barcelona, Spain (JLM); Department of Neurology, Second Medical Center, Chinese PLA General Hospital, Beijing, China (HX); Department of Neurology, Peking University First Hospital, Beijing, China (YS); Department of Psychological Medicine, Cancer Hospital of the University of Chinese Academy of Sciences, Zhejiang Cancer Hospital, Hangzhou, China (EY); and Department of Psychiatry, the First Hospital of China Medical University, Shenyang, China (YT)

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No time for dilemma: mass gatherings must be suspended

The coronavirus disease 2019 (COVID-19) pandemic places unprecedented pressure on societies and health-care systems around the world. This first pandemic of the 21st century demands internationally unified, cogent, and collective actions by individuals, communities,



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commercial bodies, institutional systems, and all governments in mitigating its escalating impact. Each day, more countries are closing their borders, repatriating their citizens, and discouraging tourism. Air travel between continents has been largely suspended.

The main public health preventive advice focuses on hand hygiene and social distancing. The latter is impossible to enforce at mass gatherings. We found the Comment by Brian McCloskey and colleagues, advocating formal risk assessments with a view to permitting mass gatherings in the time of COVID-19, puzzling at the very least.¹ As scientists, we are committed to unrestrained inquiry and dissenting opinion, but advocating a risk assessment for mass gatherings connotes an explicit approval for pending mass gathering activities at a time of an escalating global pandemic.

Advocating such a position is more than mere dissent. Mass gathering researchers have already categorically advocated for the suspension of Umrah and the potential suspension of the Hajj and the Olympic Games.² Suggesting that pending mass gatherings such as the Olympics are worthy of risk assessment and could possibly take place at this time countervenes the public health preventive messages of hygiene and social distancing.³ It sends a misleading message to the public, to policy makers and to various powerful, heavily invested stakeholders. Shortly after writing this Correspondence, the Olympic Games were officially postponed to 2021.

Certainly, if COVID-19 had remained contained in isolated pockets around the world, such recommendations would be legitimate, but the world is now subjugated by an uncontained pandemic with signs of further escalation. Allowing mass gatherings under these circumstances has the potential to endanger millions of attendees and upon return home also those who remained in their countries of origin.

Evidence supporting the cancellation of mass gathering exists, as does evidence documenting the failure to contain mass gatherings at the time of pandemic. Saudi Arabia's suspension of the Umrah pilgrimage has been protective, whereas Iran's decision to permit mass gatherings in Mashhad and Qom has been detrimental.⁴

Additional considerations supporting the cancellation of mass gatherings include reports of significant morbidity among young people, survival of viral particles on innate surfaces, and repeat waves of infections. These considerations are crucial even for mass gatherings of which most attendees are young adults (eq, sports, music). At mass gatherings of mainly older and more vulnerable people with comorbidities (mainly religious), these considerations are even more relevant. Furthermore, the density of the typical mass gathering renders social distancing and continued disinfection of hard surfaces impossible. Outbreaks emanating from mass gatherings can also serve as potent seeds for successive waves of infection through international and regional travel. Finally, even with carefully thought-out mass gatherings, unless the viral evolutionary trajectory of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is determined, premature promotion of mass gatherings can only lead to re-ignition of the pandemic. Although the initial human response can be described as panic at times of crises, complacency quickly sets in.5,6 As public health leaders, we cannot be seen to permit even any tacit endorsement of a mass gathering during this unprecedented global event. When governments and societal and economic systems are unanimously intensifying efforts toward the economically and personally challenging concept of social distancing, any call to consider mass gatherings sends a diametrically

opposing and confusing message to the public.

Together we must commit all efforts to raise a cogent and unified call to fight the pandemic. Cancelling mass gatherings is traumatic for all stakeholders, but considering the nature of the SARS-CoV-2 virus, the risk of asymptomatic carriage and transmission, the global public health preventive advice of distancing and hand hygiene, and the many remaining unknowns, there is hardly any leeway for choice.

We declare no competing interests.

*Ziad A Memish, Qanta A Ahmed, Patricia Schlagenhauf, Seydou Doumbia, Anas Khan zmemish@yahoo.com

Research & Innovation Center, King Saud Medical City, Ministry of Health and College of Medicine, Alfaisal University, Riyadh 12746, Saudi Arabia (ZAM): Hubert Department of Global Health. Rollins School of Public Health, Emory University, Atlanta, GA, USA (ZAM); Division of Pulmonary and Critical Care Medicine, Department of Medicine, NYU-Winthrop, NYU Langone, Mineola, NY, USA (QAA); University of Zürich Centre for Travel Medicine, WHO Collaborating Centre for Travellers' Health, Department of Public and Global Health, Institute for Epidemiology, Biostatistics and Prevention, Zürich, Switzerland (PS); Faculty of Medicine and Odontostomatology, University Clinical Research Center, University of Sciences Techniques and Technology of Bamako, Mali (SD); Global Centre for Mass Gatherings Medicine, Ministry of Health, Rivadh, Saudi Arabia (AK): and Department of Emergency Medicine, College of Medicine, King Saud University, Riyadh, Saudi Arabia (AK)

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