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INSIGHTS



Mental disorders and COVID-19: Towards a precision public mental health approach



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The Covid-19 pandemic, like previous global pandemics, has led to immense physical and mental suffering. Covid-19 has forced us to reflect on many aspects of our health services and social structures, and for psychiatry and neuropsychopharmacology a key question that the pandemic raises is how best to conceptualize the mental distress that emerges during a disaster. To what extent are models of mental disorder, such as posttraumatic stress disorder (PTSD), for example, useful when applied to Covid-19?

Understanding the impact of Covid-19 in terms of conditions such as PTSD has a number of distinct advantages. First, it is clear that Covid-19 brings with it traumatic events, such as exposure to near-death experiences, and unexpected loss of a loved one, which are well-known precipitants of PTSD. Indeed, Covid-19 questionnaire based surveys have found high levels of PTSD in health workers and in the community (Marvaldi et al., 2021; Nochaiwong et al., 2021). Second, we have an increasingly sophisticated knowledge of the psychobiology of PTSD, as well as a growing pharmacotherapy and psychotherapy evidence-base of efficacious interventions. Such interventions potentially bring considerable relief, in a cost-efficient way, to many (Stein et al., 2007).

But there are disadvantages of this approach. First, a great deal of suffering is not captured by diagnostic crite-

https://doi.org/10.1016/j.euroneuro.2022.02.008 0924-977X/© 2022 Elsevier B.V. and ECNP. All rights reserved. ria for mental disorders; many who experience traumatic events such as near-death experiences may not meet the threshold for a disorder such as PTSD, but nevertheless suffer significant distress and impairment. And then there are those who experience severe stressors such as loss of income, school closures, or food insecurity, which are not ordinarily considered precipitants of PTSD, but which - entirely understandably - may be accompanied by symptoms of depression or anxiety. A key example is the moral injury experienced by health workers faced with impossible choices (Greenberg et al., 2020). Second, a focus on a specific medical disorder, such as PTSD, may lead to downplaying important social determinants of suffering, or the possibility that broad societal interventions may be key. The sheer scale of the prevalence of depression and anxiety in the aftermath of covid-19, and the limited number of clinicians across the globe, necessarily means that attempts to address such symptoms solely with clinical interventions will fail.

Perhaps a public mental health perspective would be useful for addressing the twin epidemics of Covid-19 and mental suffering. This perspective would emphasize not only individual risk factors for and treatments of disorders such as PTSD, but also the importance of social determinants for and interventions against a broader spectrum of mental suffering. Since the early work on cholera prevention, public health has played a crucial role in combating infectious disease. But a public health perspective has also been use-

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ful in thinking about how best to approach more "wicked" problems that cause suffering, including motor vehicle collisions, gender-based violence, and substance misuse. Pandemics are perhaps uniquely "wicked" insofar as they not only are disasters, but they also impede a key way of coping with disaster - blocking our ability to draw on our supportive networks to increase our resilience (Brooks et al., 2020; Jones et al., 2006).

During Covid-19, we have seen attempts to address mental health issues at a societal level. National response plans for mental health services have been developed, and information about the impact of the pandemic on mental health and the value of mental health interventions has been disseminated (Kola et al., 2021). However, such efforts are not necessarily based on rigorous data; for example, cross-sectional questionnaire surveys showing high levels of depression and anxiety symptoms in convenience samples during covid-19 are neither particularly surprising nor especially informative: rather we need longitudinal data obtained using structured interviews of representative samples. And arguably there is little consensus on which societal interventions would best target key mechanisms (such as unemployment, school closures, or food insecurity) underlying such symptoms: we need more efforts to develop evidence-based policy.

Work in the field of disaster psychiatry may be particularly relevant to thinking about a public mental health approach to Covid-19. Hobfoll and colleagues, in their landmark empirically informed review and consensus statement, emphasized that key interventions after mass trauma are promoting physical safety, psychological calm, selfand community-efficacy, social connectedness, and hope (Hobfoll et al., 2007). This advice remains sensible. Hobfoll and colleagues emphasize that there is no "one-treatmentfits-all" approach to disasters, and indeed their consensus statement was not drawn up specifically with a global pandemic in mind; such a widespread and long-lasting disaster is particularly challenging.

The concept of "precision public health" attempts to integrate ideas from personalized medicine - which may be very useful for addressing specific conditions such as PTSD - together with concepts from public health (Desmond-Hellmann, 2016). Blunt public health interventions - including massive lockdowns across large geographic areas that have widely different incidences of covid-19 and varied economic and health needs - may be seen by historians of the pandemic as flawed (Cash and Patel, 2020). We need to aspire to more precise targeting of key mechanisms underlying covid-19 prevention and transmission, as well as related mental resilience and suffering, in order to intervene optimally.

At the current time, precision public mental health is more of an aspiration than a reality. Furthermore its interventions may need to be more focused on sociopolitical mechanisms than on psychobiological ones: alleviating hunger due to covid-19 is likely to be far more relevant in many parts of the world than having access to mindfulnessbased therapies (Hunt et al., 2021). Rapid and efficient vaccine roll-out to high-risk groups is the most important precision public mental health intervention for PTSD prevention that we can currently make. As we develop the framework and methods of precision public mental health, the focus of Hobfoll and colleagues on promoting physical safety, psychological calm, self- and community-efficacy, social connectedness, and hope remain key.

Declaration of Competing Interest

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