



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.



blue light frequencies in evening light (artificial darkness) can be used to reset and stabilise the circadian rhythm in humans and to treat mental illness.<sup>2</sup> Based on these empirical observations, the first circadian lighting systems are now being tested in medical and psychiatric units (eg, NCT03788993).

A new psychiatric unit in Trondheim, Norway, incorporates an evening blue-depleted light environment.<sup>2</sup> We have shown that for healthy adult volunteers, residing in this hospital light environment has a beneficial effect on the circadian system, sleep, and neurocognitive arousal over and above any benefits of usual inpatient routines.<sup>5</sup> This makes a chronobiologically informed lighting system a feasible and effective architectural design option that targets circadian rhythm disruptions—a core mechanism of developing and maintaining mental disorders.

We declare no competing interests.

Henning Johannes Drews, Jan Scott, Knut Langsrud, Daniel Vethe, \*Håvard Kallestad

havard.kallestad@ntnu.no

Department of Mental Health, Norwegian University of Science and Technology, Institutt for psykisk helse, Trondheim, Norway (HJD, KL, DV, HK); Academic Psychiatry, Institute of Neuroscience, Newcastle University, Westgate Road, Newcastle upon Tyne, UK (JS); and Division of Mental Health Care, St Olavs University Hospital, Trondheim 7006, Norway (KL, DV, HK)

- Liddicoat S, Badcock P, Killackey E. Principles for designing the built environment of mental health services. *Lancet Psychiatry* 2020; 7: 915–20.
- Scott J, Langsrud K, Goulding IR, Kallestad H. Let there be blue-depleted light: in-patient dark therapy, circadian rhythms and length of stay. *BJPsych Adv* 2020; published online Aug 25. <https://doi.org/10.1192/bja.2020.47>
- Foster RG, Peirson SN, Wulff K, Winnebeck E, Vetter C, Roenneberg T. Sleep and circadian rhythm disruption in social jetlag and mental illness. *Prog Mol Biol Transl Sci* 2013; 119: 325–46.
- Lam RW, Levitt AJ, Levitan RD, et al. Efficacy of bright light treatment, fluoxetine, and the combination in patients with nonseasonal major depressive disorder: a randomized clinical trial. *JAMA Psychiatry* 2016; 73: 56–63.
- Vethe D, Scott J, Engström M, et al. The evening light environment in hospitals can be designed to produce less disruptive effects on the circadian system and improve sleep. *Sleep* 2020; published online Sept 21. <https://doi.org/10.1093/sleep/zsaa194>.

## COVID-19 policies in the UK and consequences for mental health

The lockdown to “flatten the curve” of COVID-19 has caused harm to many people globally. Over the past 6 months it has been nearly impossible to discern what the UK government strategy is in relation to the virus: suppression, or following of the model used in Sweden to foster community immunity? In mid-September, things became clearer: the UK is on a course for suppression until a vaccine or effective mass testing is in place. For good measure, UK residents have all been punished by new limits to the number of people socialising together, and have been warned that further restrictions could be imposed unless their supposedly reckless social behaviour improves. Frightening graphs depicting scenarios rather than predictions have been used to terrify people about the resurgence of the virus. However, it might be years before a safe vaccine is available, and the mass testing proposal dubbed moonshot is scientifically unsound and could do more harm than good.<sup>1</sup>

There is another way. One which takes account of the fact that COVID-19 does not have equal effects across age groups: for young people the risk of COVID-19 seems to be very low but the mental health of young people has been disproportionately affected during this crisis.<sup>2</sup> We should allow young people to go about their lives normally and protect those who are older and more susceptible in a humane and compassionate manner;<sup>3</sup> infectious diseases specialists have good ideas about implementing this suggestion. However, in late September, hundreds of healthy, young students in Scotland and Manchester, UK, have been locked down, banned from visiting home and family, and threatened that they might not be able to go home for Christmas. It is hard to see how this policy is

within the bounds of human rights and I am deeply concerned about the impact of such measures on mental health and wellbeing.

Many people have highlighted the need not to medicalise natural reactions to the global crisis that the global community is facing as a mental illness. However, the global community cannot, and should not, ignore the evidence amassing to suggest that people of all ages are struggling. Increases in suicidal ideation and self-harm have been observed among young people in China before and after lockdown according to prospective studies that were able to collect cohort data.<sup>4</sup> It is clear that young children have been badly affected by lockdown.

Moving forward, nations should prioritise young people. They have suffered immensely in this crisis and sacrificed a lot. Moreover, the economic devastation will have an enormous impact on young people who will bear this burden for years to come. The association between economic downturn and suicide has been shown repeatedly across the globe.

Services and support for those in distress should now be prioritised and made easily accessible, in the virtual and real world. Mental health should not be left behind in this crisis. For young people, whole-school approaches involving mental health awareness have been shown to reduce suicidal ideation and behaviour.<sup>5</sup> Such evidence-based mental-health interventions should be implemented, urgently, at scale in the community.

I declare that I am chair of Reachwell, which is a group of academics who are dedicated to highlighting the neglect of children and adolescents in policy making during the pandemic.

Ellen Townsend  
ellen.townsend@nottingham.ac.uk

Self-Harm Research Group, School of Psychology, University of Nottingham, Nottingham NG7 2RD, UK

- Deeks JJ, Brookes AJ, Pollock AM. Operation Moonshot proposals are scientifically unsound. *BMJ* 2020; 370: m3699.

Published Online  
October 15, 2020  
[https://doi.org/10.1016/S2215-0366\(20\)30457-0](https://doi.org/10.1016/S2215-0366(20)30457-0)

For more on Reachwell see  
<https://reachwell.org/>

- 2 Pierce M, Hope H, Ford T, et al. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *Lancet Psychiatry* 2020; **7**: 883–92.
- 3 Gupta S, Heneghan C, Sikora K, et al. Boris must urgently rethink his Covid strategy. 2020. <https://www.spectator.co.uk/article/boris-needs-to-rethink-his-covid-strategy> (accessed Sept 25, 2020).
- 4 Zhang L, Zhang D, Fang J, Wan Y, Tao F, Sun Y. Assessment of mental health of Chinese primary school students before and after school closing and opening during the COVID-19 pandemic. *JAMA Netw Open* 2020; **3**: e2021482.
- 5 Wasserman D, Hoven CW, Wasserman C, et al. School-based suicide prevention programmes: the SEYLE cluster-randomised, controlled trial. *Lancet* 2015; **385**: 1536–44.

## COVID-19 and adolescent mental health in India

Lockdowns in India were stringently imposed from March 24, and have been eased gradually since September, but schools remain closed and online classes have replaced classroom teaching. This situation provided children and adolescents with the perfect conditions for solitude and increased internet use.<sup>1</sup> Parents are concerned about the effect of school closure, social distancing, and increased internet use on their children's mental health.<sup>2,3</sup> Increased opportunity for internet use makes it more difficult for parents to control this access, and frequent and unsupervised internet use is associated with self-harm and suicidal behaviour in adolescents with psychological risk factors.<sup>1</sup>

Coronavirus disease 2019 (COVID-19) might not be as lethal in children and adolescents as it is in adults, but it does cause a lot of psychological distress in this age group. Adolescents are experiencing acute and chronic stress because of parental anxiety, disruption of daily routines, increased family violence, and home confinement with little or no access to peers, teachers, or physical activity.

School closure and home confinement can also have a beneficial

effect on adolescent mental health, by allowing for a more cohesive family lifestyle.<sup>4</sup> However, in a socioeconomically disadvantaged country, the school environment might be more enriching than the home—nutritionally, emotionally, and developmentally. School closure has seriously disrupted adolescent lives in India, with many young people entering the workplace as a result, possibly never to return to education again.<sup>3</sup>

During the pandemic, adolescents at high risk of psychological problems might fall through the safety net provided by a protective family life, peer support, and psychological support from teachers. It is time to address adolescent mental health in India systematically, to monitor the incidence of various psychiatric disorders (eg, depression, anxiety, and self-harm behaviours), and to identify factors for both risk and resilience.

To help identify adolescents at risk of mental disorders, frontline health workers in COVID-19 community screening teams could be encouraged to detect recent changes in behaviour, substance use, and excessive isolation among children and adolescents. Teachers and parents can be trained to identify signs and symptoms that suggest poor mental health, such as sleep disturbances, excessive anger, and difficulty concentrating. Any mental health needs can then be addressed by mental health professionals, using telemental health interventions that target adolescents, which have shown promising results.<sup>5</sup> Also, task sharing and task shifting strategies could be used to develop networks of clinical care across existing health systems to provide mental health care for adolescents.

We declare no competing interests.

\**Suravi Patra, Binod Kumar Patro*  
patrasuravi@gmail.com

Department of Psychiatry (SP) and Department of Community Medicine and Family Medicine (BKP), All India Institute of Medical Sciences Bhubaneswar, Odisha, India

- 1 Marchant A, Hawton K, Stewart A, et al. A systematic review of the relationship between internet use, self-harm and suicidal behaviour in young people: the good, the bad and the unknown. *PLoS One* 2017; **12**: e0181722.
- 2 Singh S, Roy D, Sinha K, Parveen S, Sharma G, Joshi G. Impact of COVID-19 and lockdown on mental health of children and adolescents: a narrative review with recommendations. *Psychiatry Res* 2020; **293**: 113429.
- 3 Patra S, Patro BK, Acharya SP. COVID 19 lockdown and school closure: boon or bane for child mental health, results of a telephonic parent survey. *Asian J Psychiatr* 2020; **54**: 102395.
- 4 Bruining H, Bartels M, Polderman TJC, Popma A. COVID-19 and child and adolescent psychiatry: an unexpected blessing for part of our population? *Eur Child Adolesc Psychiatry* 2020; published online July 4. <https://doi.org/10.1007/s00787-020-01578-5>.
- 5 Sharma A, Sasser T, Schoenfelder Gonzalez E, Vander Stoep A, Myers K. Implementation of home-based telemental health in a large child psychiatry department during the COVID-19 crisis. *J Child Adolesc Psychopharmacol* 2020; **30**: 404–13.

## The effect of COVID-19 on hijra (third gender) people in Bangladesh

In South Asia, the hijra are referred to as a third gender, as a group of transgender women and non-binary and intersex people who were assigned male at birth. Some estimates suggest that more than 10 000 hijras live in Bangladesh, whereas others indicate there are more than 100 000. However, they are deprived of basic human rights in Bangladesh, such as access to primary health-care services, housing facilities, food, and employment opportunities.<sup>1</sup>

Hijras in Bangladesh have been adversely affected by the pandemic, particularly during the national lockdown.<sup>2</sup> Mental health problems, such as anxiety, depressive symptoms, discrimination, suicide, and domestic violence increased during the lockdown around the world, including in Bangladesh.<sup>3</sup> Hijras have long faced high levels of social stigma, discrimination, isolation, and separation, and many people in Bangladesh still have a negative perception of hijra